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Mediation of the effects of the big five personality dimensions on negative mood and confirmed affective expectations by perceived situational stress: A quasi-field study of vacationers

Avi Besser a,*, Todd K. Shackelford b

^a Department of Behavioral Sciences, Sapir Academic College, D.N. Hof Ashkelon 79165, Israel ^b Department of Psychology, Florida Atlantic University, 2912 College Avenue Davie, FL 33314, USA

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Abstract

We investigated associations between personality dimensions assessed via the Five-Factor Model and change in negative mood and confirmation of affective expectations, and the mediating role of perceived vacation-related stress in these associations. The sample consisted of 100 employees participating in their annual planned vacation assessed at entrance and checkout after spending one week at a vacation village. Higher Conscientiousness was related to lower negative mood during vacation, higher confirmation of positive affective expectations, and lower perceived stress. Perceived stress mediated the effect of Conscientiousness on low negative mood during vacation and on the confirmation of positive affective expectations. *Post-hoc* analyses indicated that planned vacation for high Conscientiousness individuals may be an opportunity to achieve a time of freedom from work demands, especially if they are low in Neuroticism, resulting in decreased stress, positive affect, and fulfillment of positive expectations. These results showcase how the hypotheses and methods of the Affective Expectation Model can be integrated with research on mood, stress, and the Five Factor Model framework.

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^{*} Corresponding author. Tel.: +972 8 6802869; fax: +972 8 6610783. E-mail address: besser@mail.sapir.ac.il (A. Besser).

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1. Introduction

Vacation is paid time away from the workplace, that is, provided for the health and well-being of employees. At the end of a vacation, however, people sometimes find that they did not enjoy themselves; they were stressed psychologically and the time away did not fulfill their positive affective expectations. Some research has documented temporal effects on a variety of leisure experiences (e.g., Stewart, 1998), showing that affective and cognitive responses often change throughout the experience, sometimes resulting in negative affective experiences (Tinsley & Tinsley, 1986). There is evidence suggesting individual differences in mood regulation during vacations (e.g., Stewart, 1998).

Many theories of affect contend that prior knowledge structures such as goals, expectations, and *personality factors* partially determine affective reactions (e.g., Clore, Schwarz, & Conway, 1994; David, Green, Martin, & Suls, 1997). One theory that makes predictions concerning the influence of top-down and bottom-up processes on affect is the Affective Expectation Model (AEM; Wilson, Lisle, Kraft, & Wetzel, 1989). According to the AEM, affect is generated with reference to prior expectations. Affective expectations are concerned with "people's prediction of how they will feel in a particular situation or toward a specific stimulus" (Wilson & Klaaren, 1992, p. 3). The AEM suggests that affective reactions are determined with reference to people's prior expectations about how they think they might feel (Klaaren, Hodges, & Wilson, 1994).

Research in the field of leisure indicates that personality can influence individuals' approaches to leisure (e.g., Melamed, Meir, & Samson, 1995). For example, Besser and Priel (2006) found that the Positivity of the Other adult attachment dimension is associated with change in negative mood during vacation and confirmed positive expectations and satisfaction with vacation leisure activities. The present research extends Besser and Priel's research to the context of the "Big Five" personality dimensions and investigates the role of perceived situational stress in the associations between personality dimensions and both negative mood and confirmed positive affective expectations. The current research is the first attempt to integrate the Five Factor Model (FFM) or Big Five framework and the AEM and to test the role of the FFM and perceived stress in a typically positive real-life situation.

Many trait psychologists today agree that five dimensions, often referred to as Neuroticism (or Emotional Stability), Extraversion, Openness to Experience, Agreeableness, and Conscientiousness, account for the range of trait differences observed among individuals (see McCrae & John, 1992). The FFM is a hierarchical taxonomy in which specific traits are subsumed within five overarching dimensions. Extraversion represents the tendency to be sociable and to experience positive affect. Agreeableness represents the tendency to be interpersonally pleasant. Persons high in Conscientiousness possess task-oriented characteristics such as being dependable, responsible, and orderly. Emotional Stability represents the tendency to be emotionally even. Openness to Experience reflects a broad range of characteristics such as unconventional values, aesthetic sensitivity, and need for variety.

Personality has been linked to the likelihood of experiencing stressful situations (e.g., Bolger & Zuckerman, 1995) and to the appraisal of an event as stressful (e.g., Guthert, Cohen, & Armeli, 1999). Neuroticism (or Emotional Stability), Extraversion, and Conscientiousness are associated with stress experience and coping (Vollrath & Torgersen, 2000). Individuals high in Neuroticism are prone to experience negative emotions such as depression, anxiety, and anger (Velting, 1999). Hopelessness and depression are predicted positively by Neuroticism and negatively by Extraversion and Conscientiousness (Velting, 1999), and positive affect is predicted positively by Conscientiousness (Watson & Clark, 1992). Research on the links between the Big Five and coping with stress indicates that Neuroticism is related to the use of emotion-focused coping strategies that predict poorer outcomes such as an increase in end-of-day distress (e.g., Guthert et al., 1999). Individuals high on Extraversion (e.g., Hooker, Frazier, & Monahan, 1994) and on Conscientiousness (e.g., Watson & Hubbard, 1996) tend to use problem-focused coping and fewer maladaptive forms of emotion-focused coping. Finally, both Extraversion and Conscientiousness are related positively to positive thinking and positive reappraisals (e.g., Watson & Hubbard, 1996). Findings regarding Openness to Experience and Agreeableness indicate only weak relationships with coping (Hooker et al., 1994).

Stress plays a role in personality/psychopathology associations (e.g., Klein, Wonderlich, & Shea, 1993). Stressful reactions have been proposed as a mediator in the link between personality and negative affectivity. For example, Kling, Ryff, Love, and Essex (2003) documented the influence personality has on positive and negative aspects of adjustment and identified stress reaction as a route through which such effects occur. The present study examined this possibility in a relatively positive context in which both pre- and post-event negative mood and subjective positive affective expectations and experiences were evaluated.

2. Hypotheses

The literature reviewed above suggested a set of 4 hypotheses that we tested in the current research: based on the AEM predictions and recent findings (Besser & Priel, 2006), we hypothesized that (1) pre-vacation positive affective expectations will be associated positively with post-vacation positive affective experiences (i.e., confirmation of positive affective expectations) and (2) participants will report higher subjective expectations and lower negative mood after vacation than before vacation. The literature on the links among personality, stress, and negative affectivity indicates overlap among Extraversion, Conscientiousness, and Emotional Stability and the theoretical description and correlates of perceived stress, affect regulation, and negative mood; thus, we hypothesized that (3) change in negative mood and confirmation of positive affective expectations would relate positively and perceived stress would relate negatively to Extraversion, Conscientiousness, and Emotional Stability. Finally, the primary goal of the present study is to examine the mechanisms underlying the potential associations between personality and negative mood or positive affective experiences. Based on models incorporating stress as a pathway from personality to negative emotionality, we hypothesized that (4) the associations between the Big Five personality dimensions and negative mood during vacation and confirmation of positive affective expectations will be mediated by perceived situational (vacation-related) stress.

3. Method

3.1. Participants and procedure

Participants were a community sample of 100 adults (48 male, 52 female) with mean age of 34.59 years (SD = 5.82) and mean years of formal education of 13.37 (SD = 1.69) who spent a one-week vacation with their spouses and at least one of their children at a vacation village in a resort city in southern Israel. Participants were employee individuals from urban areas across Israel participating in their annual planned vacation.

Participants volunteered and were interviewed individually by a research assistant at arrival before checking in (Time 1) and just before checking out (Time 2). Interviews occurred in a specially arranged quiet room. Participants arrived at the vacation village in organized groups that allowed us to approach every attendee. Among these, 87% of individuals approached agreed to participate. All of the participants who agreed to participate at Time 1 also were interviewed at Time 2. The order of presentation of questionnaires between and within participants at both times was randomized.

3.2. Measures

3.2.1. Personality dimensions

Participants completed the Ten Item Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003), an inventory for measuring standings on the Big Five personality dimensions. Each item consists of two descriptors (e.g., "I see myself as extraverted, enthusiastic") and is rated on a 7-point scale ranging from 1 (disagree strongly) to 7 (agree strongly). Participants were required to record their perceptions at arrival to the vacation village just before checking; therefore, the TIPI, rather than a longer measure, was used to reduce participant bothering, boredom, and fatigue. The TIPI provides reliable and valid assessments of the Big Five dimensions (Gosling et al., 2003). We obtained overall internal consistency reliability coefficients of .76.

3.2.2. Pre-vacation and post-vacation negative mood

Current affect was assessed at Time 1 and Time 2 using the Visual Analogue Scale (VAS; Albersnagel, 1988), composed of 18 mood adjectives. The participant is asked to indicate how he or she is feeling "at the moment" by placing a vertical mark on an 80 mm line anchored at 0% and 100% with opposing labels for each adjective (e.g., not at all sad to extremely sad). The three affective states used in the present study were dysphoria (depressed, sad, blue, and lost), hostility (hostile, irritable, annoyed, and disagreeable), and anxiety (anxious, nervous, uneasy, and tense). We obtained internal consistency reliability coefficients of .80 and .78 for dysphoria, .81 and .79 for hostility, and .82 and .78 for anxiety at Time 1 and Time 2, respectively.

3.2.3. Perceived affective expectations (pre-vacation) and subjective experience (post-vacation)

At Time 1, participants rated three statements designed to capture their anticipated overall subjective experience (i.e., affective expectations) on a scale ranging from 1 (disagree) to 10 (agree):

"I expect to enjoy this vacation," "I think this vacation will be fun," and "I will be satisfied with this vacation" (adapted from e.g., Klaaren et al., 1994; Wirtz, Kruger, Scollon, & Diener, 2003). At Time 2, participants completed a set of identical items with the verb tense changed to evaluate their overall subjective experience (e.g., "I enjoyed this vacation"). We obtained internal consistency reliability coefficients of .77 and .79 for pre-vacation Affective Expectations and post-vacation Subjective Experience, respectively.

3.2.4. Expected vacation related stress (pre-vacation) and subjective experienced vacation related stress (post-vacation)

At Time 1, participants rated a statement designed to capture their anticipated overall subjective stress, on a scale ranging from 1 (disagree) to 5 (agree): "I think this vacation will be stressful to me." At Time 2, participants completed an identical item with the verb tense changed to evaluate their overall subjective experienced stress: "I feel this vacation was stressful to me." A perceived stress during vacation score was computed and expressed as a standardized residual score representing an individual's change in perceived stress relative to prior expectations during a clearly defined period of time (before vacation to after vacation).

4. Results

4.1. Preliminary analyses

4.1.1. Affective expectations (pre-vacation) and subjective experience (post-vacation): confirmation of positive affective expectations

Correlational analyses indicated positive associations between pre-vacation positive affective expectations ("expect to enjoy this vacation", "think this vacation will be fun", and "will be satisfied with this vacation") and post-vacation positive affective experiences of these affective expectations ("I enjoyed this vacation", "this vacation was fun", and "I am satisfied with this vacation"; r = .17, p < .09; r = .23, p < .03 and r = .31, p < .002, respectively). Paired samples t-tests indicated that participants reported higher subjective experiences at Time 2 compared to their reported affective expectations at Time 1 ($t_{[99]} = 3.66$, p < .0001; $t_{[99]} = 2.20$, p < .03 and $t_{[99]} = 3.24$, p < .002 for enjoy, fun and satisfaction, respectively). Hence, participants had a better time than they expected they would (M and SDs are presented in Table 1).

4.1.2. Pre-vacation and post-vacation perceived negative mood and perceived stress

Correlational analyses indicated positive associations between pre-vacation and post-vacation negative mood (r = .44, p < .0001; r = .28, p < .005 and r = .22, p < .03, for dysphoria, anxiety and hostility, respectively) and paired samples t-tests indicated non-significant overall differences between measures of negative mood at Time 1 and Time 2. Correlational analyses also indicated positive associations between pre-vacation and post-vacation stress related to the vacation (r = .32, p < .001) and paired samples t-tests indicated non-significant overall differences between expected stress at Time 1 and subjective experienced stress at Time 2. (M and SDs are presented in Table 1).

Table 1 M and SD for study variables and correlations between big five dimensions and study variables

	Extraversion	Agreeableness	Conscientiousness	Emotional stability	Openness to experience	М	SD
Positive affective expe	ectations						
Expect to enjoy this vacation	02	.16	04	.13	.04	8.64	1.59
Think this vacation will be fun	.03	.02	06	.10	.17	8.66	1.57
Will be satisfied with this vacation	.01	.12	.10	.25, p < .01	.11	8.59	1.65
Positive affective expe	eriences						
I enjoyed this vacation	.13	.08	.29, p < .004	.11	.12	9.33	1.22
This vacation was fun	.10	.09	.26, p < .01	.16	.15	9.08	1.50
I am satisfied with this vacation	.13	.06	.27, p < .008	.14	.14	9.14	1.14
Pre-vacation negative	mood						
Dysphoria	22, <i>p</i> < .03	02	16	30, p < .002	31, <i>p</i> < .002	7.43	9.43
Anxiety	09	24, <i>p</i> < .02	08	21, p < .03	20, <i>p</i> < .05	19.72	7.65
Hostility	.03	16	13	13	07	19.12	7.04
Post-vacation negative	e mood						
Dysphoria	.02	21, <i>p</i> < .04	20, p < .05	27, p < .006	05	6.33	7.14
Anxiety	.13	21, <i>p</i> ≤ .04	22 , <i>p</i> ≤ .03	07	05	19.00	7.56
Hostility	.12	20, p < .05	30, p < .002	03	03	17.74	6.51
Perceived stress ^a	.04	05	27, p < .008	.04	04		
Think this vacation will be stressful	.10	12	03	28, p < .005	04	1.92	1.34
This vacation was stressful	.07	08	26, p < .009	05	05	1.81	1.03
M	7.04	11.95	12.88	10.97	10.31		
SD	3.30	2.00	1.84	2.82	2.78		

Note. N = 100 (two-tailed tests).

4.1.3. Big five personality dimensions effects on confirmed positive affective expectations and change in negative mood: the roles of perceived stress

We measured Confirmed Positive Affective Expectations and Change in Negative Mood using a "pre-post" panel design. This design compares individual characteristics in the same participants, measured in similar ways before and after an intervention (e.g., vacation). We controlled for Time 1 measures in the prediction of Time 2 measures and, therefore, Time 2 outcome variables repre-

^a Expressed as standardized residual scores.

sent changes in mood and experiences relative to prior expectations during a clearly defined period of time—in the current research, before vacation to after vacation.

The correlations between scores on the Big Five personality dimensions and the target variables are presented in Table 1. Extraversion correlated only with low levels of pre-vacation dysphoria. Agreeableness correlated with low levels of pre-vacation anxiety and with all three post-vacation negative mood measures. Emotional Stability correlated positively with expectations of satisfaction with the vacation, pre-vacation low levels of dysphoria and anxiety, post-vacation low levels of dysphoria, and negatively with expectation that the vacation will be stressful. Openness to Experience correlated with pre-vacation low levels of dysphoria and anxiety. Conscientiousness was the only personality dimension to display significant associations with all pre-vacation positive affective expectations, post-vacation negative mood measures, and perceived stress during vacation.

In summary, the correlational analyses indicated that, of the Big Five personality dimensions (predictors), Conscientiousness was the only dimension associated with perceived stress during vacation (mediator) and with post-vacation negative mood and the affective experiences variables (outcomes). Accordingly, Conscientiousness is the only variable that meets the requirements for testing for mediation (Baron & Kenny, 1986)¹ and, therefore, the other personality dimensions were excluded from subsequent analyses.²

4.2. Primary data analyses

We conducted the primary analyses in two stages (Anderson & Gerbing, 1988). First, we used structural equation modeling (SEM) to examine the simultaneous *direct* effect of Conscientiousness (predictor) on Negative Mood During Vacation and on Confirmed Positive Affective Expectations (outcomes). Next, we used SEM to examine the *mediational* model in Fig. 1. In both the direct and mediational models, we controlled for the covariance among the outcome variables; that is, the correlation between Negative Mood During Vacation and Confirmed Positive Affective Expectations (disturbance). We also controlled for autocorrelations among error terms of manifested within-subject repeated measures (pre-post vacation; see Farrell, 1994). We conducted analyses using AMOS 4.01 (Arbuckle, 1999). (see Fig. 1)

(1) Direct Effects Model. This model fits the data well ($\chi^2 = 88.91$; df = 50; $\chi^2/df = 1.78$; NNFI = .90; CFI = .95; RMSEA = .06). Conscientiousness predicted higher levels of

¹ Mediation is indicated by the following criteria: (a) there must be a significant association between the predictor and criterion variables, and (b) in an equation including both the mediator and the criterion variables, there must be a significant association between the predictor and mediator, and the mediator must be a significant predictor of the criterion variables. If the significant direct relationship between the predictor and the criterion variables in the equation, including both the mediator and the predictor variable, declines, the obtained pattern is consistent with the mediation hypothesis. (Baron & Kenny, 1986).

² When all five personality dimensions are included in the regression models predicting each of the post-vacation measures while controlling for the same pre-vacation measures (i.e., change in each negative mood variables and confirmed positive affect measures), Conscientiousness is the only significant predictor across all models.

³ Model fit was assessed with the following indices: χ^2 divided by degrees of freedom (χ^2 /df), the Non-Normed Fit Index (NNFI; Bentler & Bonett, 1980), the Comparative Fit Index (CFI; Bentler, 1990), and the Root Mean Square Error of Approximation (RMSEA; Steiger, 1980).

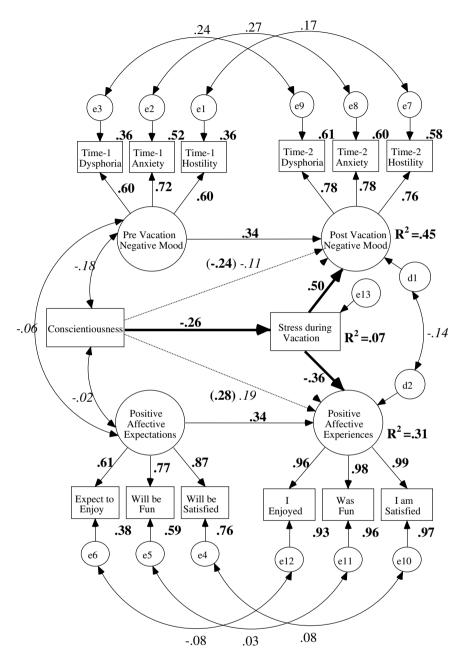


Fig. 1. The Mediating Role of Stress during Vacation in the Effect of Conscientiousness on Change in Negative Mood during Vacation and on Confirmed Positive Affective Expectation. *Note*: Rectangles indicate measured variables and large circles represent latent constructs. Small circles (e) reflect residuals or (d) disturbances; numbers above or nearby endogenous variables represent the proportion of variance explained (R^2). Bidirectional arrows depict correlations and unidirectional arrows depict hypothesized directional, or "causal," links. Standardized maximum likelihood parameters are used. Bold estimates are statistically significant. Values inside parentheses are for the direct effect model. Values outside parentheses are from the final model including both direct and mediating effects.

- Confirmed Positive Affective Expectations ($\beta = .28$, t = 3.12, p < .002) and lower levels of Negative Mood During Vacation ($\beta = -.24$, t = 2.42, p < .016).
- (2) Mediational Effects Model (Fig. 1). In specifying the SEM model, we expected that the effect of Conscientiousness on (a) Confirmed Positive Affective Expectations and (b) Negative Mood During Vacation would be mediated by the effect of Conscientiousness on Perceived Stress During Vacation.⁴ This model fits the data well ($\chi^2 = 96.67$; df = 58; $\chi^2/df = 1.66$; NNFI = .90; CFI = .96; RMSEA = .06). The results indicated that the significant effects of Conscientiousness on Confirmed Positive Affective Expectations and on Negative Mood During Vacation ($\beta = .28$, t = 3.12, p < .002 and $\beta = -.24$, t = 2.42, p < .016, respectively) were reduced and nonsignificant ($\beta = -.11$, Ns. and $\beta = .19$, Ns.) when the assumed mediator Perceived Stress During Vacation was included in the model (see Fig. 1). As indicated in Fig. 1, high levels of Conscientiousness were associated with low Perceived Stress During Vacation ($\beta = -.26$, t = -2.58, p < .01), which in turn was associated with lower levels of Negative Mood During Vacation ($\beta = .50$, t = 4.9, p < .0001) and higher levels of Confirmed Positive Expectations ($\beta = -.36$, t = -4.02, p < .0001). These mediated effects were significant [for the mediating effect of Perceived Stress During Vacation in the association between Conscientiousness and (a) Negative Mood During Vacation z' = 2.32, p < .02 and (b) Confirmed Positive Expectations z' = 2.22, p < .03].

To identify a more parsimonious model, we modified the model presented in Fig. 1, following Bentler and Mooijaart (1989), by removing statistically nonsignificant paths. The more parsimonious model fits the data well ($\chi^2 = 101.97$; df = 64; $\chi^2/\text{df} = 1.59$; NNFI = .90; CFI = .96; RMSEA = .06). The final model (see Fig. 1 dashed paths) indicated that the effects of Conscientiousness on Change in Negative Mood and on Confirmed Positive Affective Expectations were mediated by Perceived Stress During Vacation. Thus, vacationers high in Conscientiousness experienced less stress related to the vacation that, in turn, increased fulfillment of their pre-vacation positive affective expectations and generated lower levels of negative mood during the vacation.

5. Discussion

The current research tested a model of the links between vacationers' personality and fulfillment of positive affective expectations and change in negative mood. This research developed a model that underscores the importance of perceived situational stress in a real-life leisure situation. In accordance with a recent study in the field of vacation and satisfaction with leisure activities (Besser & Priel, 2006), the current results indicate stable mood during vacation and fulfillment of positive affective experiences, when compared to initial positive affective expectations.

The current results highlight the importance of Conscientiousness in the context of experienced confirmation of positive affective expectations, low perceived stress, and low negative mood during vacation. These results are congruent with accumulating research highlighting the beneficial effects of Conscientiousness (e.g., Gramzow et al., 2004), such as decreased use of ineffective

⁴ Although the direct effects of Pre-Vacation Negative Mood on Positive Affective Experiences and of Positive Affective Expectations on Post-Vacation Negative Mood were non-significant, we retained these paths and their effect on the mediator to ensure that these and other effects were not altered.

emotion-focused strategies to cope with stress, including self-blame, distraction, and disengagement (Watson & Hubbard, 1996). In addition, despite the lack of a mediator effect of stress, agreeable individuals have lower negative mood after vacation.

Research also indicates a link between Conscientiousness and a tendency to plan and to prioritize activities, resulting in additional time to complete tasks (see: Kelly, Johnson, & Miller, 2003), less procrastination (Johnson & Bloom, 1995), and a more *positive attitude* and approach to tasks (Gellatly, 1996). Conscientiousness also correlates positively with scores on the Time Use Efficiency Scale (TUES; see, Kelly & Johnson, 2005). Scores on the TUES, in turn, are correlated positively with self-efficacy and an internal locus of control, and negatively with *stress* (Kelly, 2004). Individuals that are high in Conscientiousness, therefore, may plan a vacation well, have a positive attitude and approach to the vacation, and use their vacation time efficiently, which generates less stress, increased positive affect, and confirmation of their affective expectations.

Despite the results indicating that negative mood remains stable during vacations, participants high in the Conscientiousness experience lower negative mood during vacations. Moreover, among these participants, low perceived stress mediated the experience of lower negative mood. Individuals high in Conscientiousness therefore may shape their affective experiences to fit their expectations. Wilson and colleagues (Wilson et al., 1989) have presented evidence that people frequently assimilate affective experiences to their expectations. This tendency may play an important role in the affect regulation process, promoting positive affect and lower negative mood among participants high in Conscientiousness. The effect of Conscientiousness on negative mood and positive affective expectations and experiences is consistent with theories of affect that contend that prior knowledge structures such as goals and expectations partially determine affective reactions (see, e.g., Clore et al., 1994).

The unique effects of Conscientiousness on vacationer mood underscore effects of this personality dimension that extend beyond the effects of general well-being. Although Emotional Stability and Extraversion are related to subjective well-being, recent findings suggest that Conscientiousness is an additional dimension of personality specifically relevant to understanding subjective well-being (e.g., McCrae & Costa, 1991; Watson & Clark, 1992).

Conscientiousness is linked consistently with self-discipline, achievement striving, dutifulness, and competence. The conscientious individual's persistence and self-discipline might motivate him or her to persist on tasks until those tasks have been completed successfully. We might, therefore, expect that conscientious individuals would have difficulties reaching relaxation on the assumption there nearly always remain tasks to be completed at work, resulting in increased stress during the vacation period. However, the current results indicate that Conscientiousness is associated with low levels of stress during vacation. Recent work by Vollrath and Torgersen (2000) might help to explain this otherwise puzzling finding. Vollrath and Torgersen found that individuals with a personality "type" that combines low Conscientiousness with high Neuroticism showed high vulnerability to stress and poor coping skills. In *post-hoc* analyses, 5 we found

⁵ We regressed Conscientiousness and Neuroticism (entered in the first step) and the Conscientiousness × Neuroticism interaction (entered in the second step) on Perceived Stress During Vacation (standardized residual score of pre-post vacation). Results indicated a significant main effect only for Conscientiousness ($\beta = -.26$, t = -2.70, p < .008, F [2, 97] = 3.75, p < .03) and significant Conscientiousness × Neuroticism interaction ($\beta = .20$, t = -1.98, p < .05, F [3, 96] = 3.65, p < .02). Variables were centered prior to the computation of the product (interaction) term.

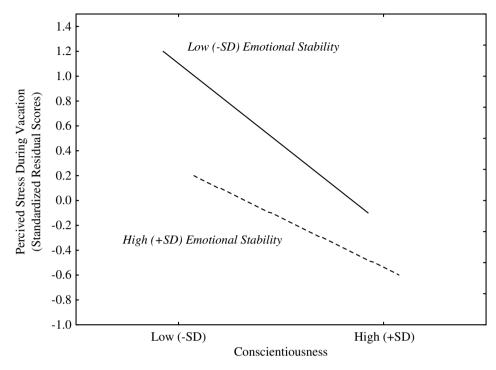


Fig. 2. Relations between high (+1 SD) and low (-1 SD) Conscientiousness and Perceived Stress During Vacation for high (+1 SD) and low (-1 SD) levels of Emotional Stability. *Note*: Low (-SD) Emotional Stability = High Neuroticism; High (-SD) Emotional Stability = Low Neuroticism. Interaction plotted according to Cohen and Cohen's (1983, p. 323 and p. 419 recommendation).

corroborative empirical support for Vollrath and Torgersen's results (see Fig. 2): planned vacation for high Conscientiousness individuals may be an opportunity to achieve a time of freedom from work demands and routines, especially if they are low in Neuroticism (high in Emotional Stability), resulting in decreased stress, positive affect, and fulfillment of positive expectations. The same interaction is important for many health risk behaviors, such as smoking (see Terracciano & Costa, 2004).

Previous research has established conscientiousness as a predictor of longevity (e.g., Friedman, Tucker, Tomlinson-Keasey, & Schwartz, 1993; Martin & Friedman, 2000). One possible explanation for this relationship is that conscientious people are more reliably attentive to their health (e.g., exercise regularly, do not smoke, or quit smoking). However, conscientiousness still predicted longevity after taking into account some health habits (smoking, alcohol consumption). Even among non-smokers, for example, more conscientious people lived longer than less conscientious people. Little is yet known about the underlying mechanisms. The present study's model implies another explanation for the conscientiousness-longevity link: Conscientiousness affects longevity through its effects on stress management and coping strategies; conscientious people live longer because they are better at avoiding stress and enjoying life that, in turn, have positive health consequences. Conscientiousness may have wide-ranging effects on health-relevant activities through its effects on perceived stress and stress tolerance, with the result that conscientious people have better health and enjoy greater longevity.

A methodological caveat to the present study is the exclusive use of self-report assessments. Further studies should involve more direct observation of vacationers' behaviors and involvement in activities, as well as additional measures of mood, stress, and well-being using psychobiological indicators. Moreover, interpretation of the findings of the present study should take into account the limitations of using a one-item stressful measure; further studies should use a multidimensional measure of stress to replicate our current results. Finally, to assess the generalizability of the findings and their interpretation, it is important to evaluate the measurement invariance of constructs and the stability of patterns of associations obtained in this study in different samples such as single persons, couples without children, and unemployed people.

Despite these limitations, the present study represents a first attempt to integrate the FFM and the AEM and to investigate perceived stress in a typically positive context as a mediator in the link between personality and both mood and affective expectations. The results showcase the value of integrating different theoretical frameworks for the purpose of understanding individual differences in mood and psychological well-being.

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References

- Albersnagel, F. A. (1988). Velten and musical mood induction procedures: a comparison with accessibility of thought associations. *Behavior Research and Therapy*, 26, 79–96.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: a review and recommended two-step approach. *Psychological Bulletin*, 103, 411–423.
- Arbuckle, J. L. (1999). AMOS 4.01: a structural equation modeling software. Chicago, IL: Small Waters Corporation. Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51, 1173–1182.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. Psychological Bulletin, 107, 238-246.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.
- Bentler, P. M., & Mooijaart, A. (1989). Choice of structural model via parsimony: a rationale based on precision. *Psychological Bulletin, 106*, 315–317.
- Besser, A., & Priel, B. (2006). Models of attachment, confirmation of positive affective expectations and satisfaction with vacation activities: a pre-post panel design study of leisure. *Personality and Individual Differences*, 41, 1055–1065.
- Bolger, N., & Zuckerman, A. (1995). A framework for studying personality in the stress process. *Journal of Personality and Social Psychology*, 69, 890–902.
- Clore, G. L., Schwarz, N., & Conway, M. (1994). Affective causes and consequences of social information processing (second ed.). In R. S. Wyer & T. K. Srull (Eds.). *Handbook of social cognition* (Vol. 1, pp. 323–418). Hillsdale, NJ: Erlbaum.
- Cohen, J., & Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavioral sciences (second ed.). Hillsdale, NJ: Erlbaum.

- David, J., Green, P., Martin, R., & Suls, J. (1997). Differential roles of neuroticism, extraversion and event desirability on mood in daily life: an integrative model of top-down and bottom-up influences. *Journal of Personality and Social Psychology*, 73, 149–159.
- Farrell, D. A. (1994). Structural equation modeling with longitudinal data: strategies for examining group differences and reciprocal relationships. *Journal of Consulting and Clinical Psychology*, 62, 477–487.
- Friedman, H. S., Tucker, J. S., Tomlinson-Keasey, C., & Schwartz, J. E. (1993). Does childhood personality predict longevity? *Journal of Personality and Social Psychology*, 65, 176–185.
- Gellatly, I. R. (1996). Conscientiousness and task performance: test of a cognitive process model. *Journal of Applied Psychology*, 81, 474–482.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B. Jr., (2003). A very brief measure of the Big Five personality domains. *Journal of Research in Personality*, 37, 504–528.
- Gramzow, R. H., Sedikides, C., Panter, A. T., Sathy, V., Harris, J. M., & Insko, C. A. (2004). Patterns of self-regulation and the Big Five. *European Journal of Personality*, 18, 367–385.
- Guthert, K. C., Cohen, L. H., & Armeli, S. (1999). Role of neuroticism in daily stress and coping. *Journal of Personality and Social Psychology*, 77, 1087–1100.
- Hooker, K., Frazier, L. D., & Monahan, D. J. (1994). Personality and coping among caregivers of spouses with dementia. *The Gerontologist*, 34, 386–392.
- Johnson, J. L., & Bloom, A. M. (1995). An analysis of the contribution of the five factors of personality on variance in academic procrastination. *Personality and Individual Differences*, 18, 127–133.
- Kelly, W. E. (2004). As achievement sails the river of time: the role of time use efficiency in grade-point average. Educational Research Quarterly, 27, 3–8.
- Kelly, W. E., & Johnson, J. L. (2005). Time use efficiency and the five-factor model of personality. *Education*, 125, 511–515.
- Kelly, W. E., Johnson, J. L., & Miller, M. J. (2003). Conscientiousness and the prediction of task duration. *North American Journal of Psychology*, 5, 443–450.
- Klaaren, K. J., Hodges, S. D., & Wilson, T. D. (1994). The role of affective expectations in subjective experience and decision-making. *Social Cognition*, 12, 77–101.
- Klein, M. H., Wonderlich, S., & Shea, M. T. D. A. (1993). Models of relationships between personality and depression: Toward a framework for theory and research. In M. H. Klein, D. J. Kupfer, & M. T. Shea (Eds.), *Personality and depression: a current view* (pp. 1–54). New York: Guilford.
- Kling, K. C., Ryff, C. D., Love, G., & Essex, M. (2003). Exploring the influence of personality on depressive symptoms and self-esteem across a significant life transition. *Journal of Personality and Social Psychology*, 85, 922–932.
- Martin, L. R., & Friedman, H. S. (2000). Comparing personality scales across time: an illustrative study of validity and consistency in life-span archival data. *Journal of Personality*, 68, 85–110.
- McCrae, R. R., & Costa, P. T. (1991). Adding Liebe und Arbeit: the full five-factor model and well-being. *Personality and Social Psychology Bulletin*, 17, 227–232.
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60, 175–215.
- Melamed, S., Meir, E. I., & Samson, A. (1995). The benefits of personality-leisure congruence: evidence and implication. *Journal of Leisure Research*, 27, 25–40.
- Steiger, J. H. (1980). Test for comparing elements of a correlation matrix. *Psychological Bulletin*, 87, 245–251.
- Stewart, W. P. (1998). Leisure as multiphase experiences: challenging traditions. *Journal of Leisure Research*, 30, 391–400.
- Terracciano, A., & Costa, P. T. Jr., (2004). Smoking and the Five-Factor Model of personality. *Addiction*, 99, 472–481. Tinsley, H., & Tinsley, D. (1986). A theory of the attributes, benefits, and causes of leisure experience. *Leisure Sciences*, 8, 1–5.
- Velting, D. M. (1999). The effectiveness of coping meta-strategies: perceived efficiency, emotional correlates and cognitive performance. *Personality and Individual Differences*, 26, 923–939.
- Vollrath, M., & Torgersen, S. (2000). Personality types and coping. Personality and Individual Differences, 29, 367–378.
 Watson, D., & Clark, L. A. (1992). On traits and temperament: general and specific factors of emotional experience and their relation to the five-factor model. Journal of Personality, 60, 441–476.

- Watson, D., & Hubbard, B. (1996). Adaptational style and dispositional structure: coping in the context of the five-factor model. *Journal of Personality*, 64, 737–774.
- Wilson, T. D., & Klaaren, K. J. (1992). The role of affective expectations in affective experience. In M. S. Clark (Ed.). *Review of Personality and Social Psychology: emotion and Social Behavior* (Vol. 14, pp. 1–31). Newbury Park, CA: Sage.
- Wilson, T. D., Lisle, D. J., Kraft, D., & Wetzel, C. G. (1989). Preferences as expectation-driven inferences: effects of affective expectations on affective experience. *Journal of Personality and Social Psychology*, 56, 519–530.
- Wirtz, D., Kruger, J., Scollon, C. N., & Diener, E. (2003). What to do on spring break? Predicting future choice based on online versus recalled affect. *Psychological Science*, 14, 520–524.