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Emotional Style Questionnaire: A Multidimensional Measure of Healthy Emotionality

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Abstract

In four studies, we document the development and validation of the Emotional Style Questionnaire (ESQ)—a 24-item self-report measure that captures how people vary across six dimensions that make up a healthy emotional life. These six dimensions (*Outlook, Resilience, Social Intuition, Self-Awareness, Sensitivity to Context* and *Attention*) are based on a theoretical framework drawn from neuroscientific studies of emotion. Study 1 reports the development of the ESQ and provides initial support for the proposed factorial structure of the scale. Study 2 confirms the adequacy of the factorial structure in a second sample and establishes the construct validity of each of the six subscales. In Study 3, we test the relationship between the ESQ as a measure of healthy emotionality and various indicators of psychological and physical well-being. Finally, Study 4 investigates the test-retest reliability of the scale and reveals very good reliability across an interval of 4 weeks. We conclude that the ESQ is a psychometrically solid and easily implementable instrument that can be used to gauge healthy emotionality and its components in both clinical and research settings.

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¹In all 4 studies reported in this paper, attention checks were embedded in the online questionnaires to ensure higher data quality. The data from participants who failed these checks have been removed from the data sets prior to any analyses. The reported sample sizes reflect the number of participants after this process.

Keywords

Emotion; mental health; well-being; outlook; resilience; self-awareness; attention; emotional intelligence

Emotions are central and highly consequential to the human experience. Our habitual emotional patterns have an impact on virtually every domain of our lives, and are tightly intertwined with our well-being. For both individual and societal flourishing, healthy emotional lives are a prerequisite. Yet what exactly constitutes a healthy emotional life? What qualities relevant to emotion are associated with optimal functioning and better life outcomes?

In an attempt to answer these questions, one of us has proposed in previous work a theoretical model drawn from neuroscientific studies of emotion [name deleted to maintain the integrity of the review process, 2012]. This model specifies six major dimensions of emotional life, which are each prominently relevant to psychological well-being. The main goal of the current article is to present a psychometrically reliable and easily implementable self-report measure to capture how people vary across these dimensions. Such an instrument could be used in both clinical and research settings to provide thorough information about a person's emotional profile and be of predictive value. In the next section, we first explain in greater depth the six dimensions that Emotional Style comprises. After that, we turn our attention to the development and validation of the Emotional Style Questionnaire. Finally, we document the association of our questionnaire with various indicators of psychological and physical well-being.

The Six Dimensions of Emotional Life

The study of affective neuroscience has yielded major discoveries in the past few decades about the brain mechanisms that underlie emotions. Taking stock of the field with the aim of identifying the major components of a person's emotional make-up, Author has proposed six dimensions governed by specific brain circuits [name deleted, 2012]. These six dimensions are *Outlook*, *Resilience*, *Social Intuition*, *Self-Awareness*, *Sensitivity to Context*, and *Attention*. Each of these dimensions describes a continuum with two extremes that in most cases reflect heightened or reduced activity in the brain circuits that underlie these dimensions. Who we are emotionally, or our Emotional Style, is a function of where we fall along these six dimensions. Our unique Emotional Style determines the kind of emotional states we experience, as well as their intensity and duration. Like any other complex behavioral trait, variations in Emotional Style are partly explained by heritable, genetic influences and partly by experiential factors. These individual differences are theorized to be associated with temperament and personality, but not reducible to them. Next, we describe what each of these dimensions refer to and how the extremes of each dimension look.

Outlook.

Outlook refers to the ability to sustain positive emotion over time. People at the high extreme of the Outlook spectrum tend to be positive, sunny types. Once a positive emotion

(e.g., joy, pride, awe) arises in them, it persists for a longer duration. In the long run, this persistence has a strong carryover effect and translates into a generally positive, optimistic outlook about life. The Outlook dimension thus subsumes both to the ability to maintain positive emotions that arise in the moment, as well as a general disposition toward positivity experienced over time. People who inhabit the low extreme of this dimension, on the other hand, have shorter-lived reactions to positive stimuli. Even if they experience positive emotions, these melt away quickly. The inability to keep positive emotions alive for longer durations translates into a negative, pessimistic outlook in the long run.

It is important to note that the hallmark characteristic of the Outlook dimension is the ability to *sustain* positive emotions, rather than a capacity to experience them at all or with intensity. Relatedly, Heller and colleagues (2009) found that when first presented with images meant to induce positive affect (e.g., a mother embracing her baby), depressed and non-depressed participants did not differ in the level of activation in the brain's reward circuits, specifically, the nucleus accumbens region of the ventral striatum. What set the two groups apart was that depressed participants failed to sustain this activity over time. We thus posit that the ability to sustain engagement of brain structures involved in positive affect and reward largely determines where people fall on the Outlook spectrum. As we will see, this dimension robustly predicts various markers of well-being.

Resilience.

The Resilience dimension, like the Outlook dimension, describes a quality of affective chronometry—or the temporal dynamics of emotional responding. While Outlook refers to the ability to sustain positive emotion, Resilience refers to the ability to recover from negative emotion. People at the high extreme of this continuum are fast to recover from negative emotions such as fear, sadness, or anger, whereas those at the low extreme are slow to recover, and get frequently crippled by adversity. Importantly, Resilience about trivial events is predictive of Resilience about momentous ones. In other words, people who are quicker to regain their emotional equilibrium after a minor daily hassle also tend to recover faster from bigger life challenges. Hence, this dimension is very closely linked to psychological well-being.

Resilience is marked by increased connectivity between prefrontal regulatory regions and the amygdala (Davidson & McEwen, 2012; Kim & Whalen, 2009). More resilient people show increased connectivity between the prefrontal cortex and amygdala than less resilient people. As with the Outlook dimension, Resilience is defined by the rapidity with which people recover from a negative event, and not by the magnitude of their initial reactivity (Schuyler et al., 2014).

Even though they are conceptually different and based in different brain mechanisms, the Outlook and Resilience dimensions are closely related and can be considered interdependent processes. The ability to bounce back quickly from negative events inevitably facilitates the maintenance of positive affect and the ability to maintain positive affect inevitably facilitates bouncing back from negative events. Indeed, as we will see, these two dimensions tend to correlate very highly.

Social Intuition.

Social Intuition refers to one's degree of attunement to nonverbal social cues. People high on the Social Intuition dimension are adept at reading nonverbal cues such as facial expressions, body language or vocal intonation and infer social information from others' emotional states. People low on this dimension, on the other hand, have difficulty picking up and decoding subtle emotional signals. Extreme insensitivity to such signals characterizes people on the autism spectrum, who struggle to read facial expressions and other cues to emotion. Conversely, people with acute sensitivity to the emotional states of others display high levels of empathy and compassion, as being able to notice and decode emotional cues is a prerequisite for responding to them.

In the brain, we look for Social Intuition in the fusiform gyrus, which is part of the visual cortex, and the amygdala—a key structure in a circuit known to be important for social cognition. While looking at pictures of faces, people high on the Social Intuition dimension display high levels of fusiform gyrus activation and low-to-moderate amygdala activity, while this pattern is reversed for people who fall on the low end of the dimension (Dalton et al., 2005). Inadequacies in reading others' emotions may have severe consequences for interpersonal relationships, hence low levels of Social Intuition are expected to predict lower well-being.

Self-Awareness.

Self-Awareness refers to the ability to perceive one's bodily signals that reflect emotions. People high on this dimension are sensitive to their internal states—they are attuned to the physiological and emotional cues that arise within their bodies and adept at recognizing and interpreting them for what they are. People low on Self-Awareness, on the other hand, have an inner self that is more opaque to their consciousness. They have less insight into their emotional life and into the reasons why they act and react in the ways they do.

The region key to the brain for Self-Awareness is the insula, which serves as the brain's monitoring station for everything below the neck and within the body. Accordingly, high levels of insula activity mark high levels of Self-Awareness and lower levels of activity mark low levels. Higher insula activation is associated not only with greater interoceptive awareness, but also with greater awareness of one's emotions, given the importance of the former to the latter. Indeed, Lower levels of insula activity in the brain are predictive of higher levels of alexithymia—difficulty identifying and describing one's feelings (Bird et al., 2010).

A heightened sensitivity to one's own physiological and emotional states should be conducive to understanding and regulating one's emotions more effectively, hence conducive to higher well-being.

Sensitivity to Context.

Sensitivity to Context refers to the degree with which our emotional and behavioral responses take into account our social context. One can think of this dimension as the outer-directed version of Self-Awareness: Whereas Self-Awareness reflects attunement to one's

own physiological and emotional cues, Sensitivity to Context reflects attunement to the social environment. Sensitivity to the rules of social engagement and the capacity to regulate oneself in accordance with these rules constitutes the essence of Sensitivity to Context. People high on this dimension know how to modify their responses to the implicit rules and expectations that govern different social situations. People low on this dimension, on the other hand, are at times insufficiently sensitive to the surrounding context and their behavior can be judged as oblivious or inappropriate (e.g., talking loudly during a movie, telling dirty jokes to one's in-laws, dressing inappropriately for the workplace).

Research suggests that the hippocampus and interconnected structures play an important role in helping to assess context and attune behavior to context. Differences in Sensitivity to Context are thus largely a function of differences in the strength of the connections between the hippocampus and other brain regions, particularly the prefrontal cortex. Low hippocampus activity and low connectivity with the prefrontal cortex marks people low in Sensitivity to Context, whereas higher activity and connectivity of the hippocampus marks people high in Sensitivity to Context.

Attention.

Attention refers to the ability to screen out distractions and stay focused. People high on this dimension have a sharp and clear focus. In contrast, the attention of those low on this dimension gets easily captured by the most attention-grabbing stimuli in the environment. Attention is typically regarded as a component of cognitive ability, however, we propose that it is also an important aspect of Emotional Style: Emotional stimuli (as opposed to sensory stimuli) command an untoward share of our attention, and the ability to filter out emotional distractions is closely linked to psychological well-being. People who are good at screening out emotional distractions are not pushed and pulled by constant emotional ups and downs. Those who are not so good at this, on the other hand, get frequently distracted by their impulses, which is an impediment to both accomplishing tasks and maintaining equanimity.

Out of several distinct forms of attention, we see selective attention as especially relevant to Emotional Style. Selective attention refers to focusing on certain features of one's environment and ignoring others. It is this capacity that allows us to successfully screen out sensory or emotion-laden distractions and concentrate on what we choose to focus on. As to the brain basis of the Attention dimension, we know that selective attention is marked by enhanced activation in the prefrontal cortex and the parietal cortex, which constitute a circuit for selective attention. The parietal cortex is also of critical importance to attention, in that it points attention to particular places and thereby helps focusing on a specific target.

Attention and emotion are intimate partners, and higher degrees of Attention are associated with higher emotional balance and well-being. A wandering mind has been called "an unhappy mind" (Killingsworth & Gilbert, 2010). We therefore expect Attention to be closely related to psychological well-being.

Measuring Emotional Style: Overview of Studies

Our focus in the remainder of this article is on the development and validation of the Emotional Style Questionnaire (ESQ). This questionnaire aims to capture the six dimensions of Emotional Style, while also standing on its own as an integrative measure of healthy emotionality. To that purpose, we conducted four studies, through which we created the measure, validated it, and established its nomological network. All study procedures have been approved by [name removed to maintain the integrity of the review process] Institutional Review Board.

Study 1

The aim of Study 1 was to reduce a large pool of items to psychometrically sound items that would eventually comprise ESQ, and to provide an initial test of the factorial structure of this scale. To do this, we administered an item pool capturing the six dimensions of Emotional Style to a large sample.

To generate the initial item pool, we turned to [title of the book and name of the author are deleted, 2012]. The book, after introducing each dimension of Emotional Style, offers a selfassessment tool for readers to assess where they fall with regard to that dimension. Readers get 10 statements per dimension and are asked to indicate with a “Yes” or “No” how representative the statement is of their own experience. To create the initial item pool, we thoroughly reviewed these 60 statements and assessed their suitability for our purposes. For the majority of them, we shortened the statements and revised wording, with the goal of improving clarity, preventing double-barreled items, and decreasing the conversational tone of the language. Some items were dropped, and some new items, deemed to more accurately reflect the underlying construct and be of higher quality, were added. We also simplified the language of the items to make the scale more easily comprehensible to people from a wide range of educational backgrounds. At the end of this process, we had a pool of 36 face-valid items (6 items per dimension). The authors of the paper, all familiar with the Emotional Style framework and its six dimensions, reviewed the final items and agreed that they represented the underlying constructs.

Using this pool, we tested a model that grouped the 36 items into six first-order factors representing each dimension of Emotional Style. Given our theoretical framework, we also expected that the items would converge into a second-order factor indicating Healthy Emotionality. As we intended the final questionnaire to be used in large-scale data collection efforts in the future, we aimed to create a relatively short scale. To address the trade-off between a small number of items and good psychometric properties, we decided that the number of items per dimension should not be smaller than four. Finally, for symmetry purposes, we aimed for each dimension of the ESQ to consist of the same number of items.

Method

Participants and Recruitment

709 American participants were recruited on Amazon's Mechanical Turk to complete an online survey in exchange for a small amount of compensation.¹ One participant was excluded from data analysis for failing to respond to 16 out of the 36 ESQ items, leaving a final sample of 708 participants with a mean age of 38.12 ($SD = 12.13$). This sample consisted of 358 females, 348 males, one person who indicated their gender as "other", and one person who did not specify it. Ethnically, 76.4% of the participants reported being White, 7.6% African American, 7.5% Asian American, 5.8% Hispanic, 2.5% chose "Other", and 0.1% did not provide this information.

Procedure and Materials

After giving their informed consent, participants responded to 36 items capturing the 6 dimensions of Emotional Style. For each item, they indicated their agreement on a Likert scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*).

Results and Discussion

There were 2 participants who had failed to respond to two of the 36 ESQ items, and 37 participants who had failed to respond to one item. For these participants, missing data imputation was performed using the regression method in SPSS 24.²

As a first step, we tested the proposed model of the ESQ—grouping the initial 36 items into six first-order factors representing each dimension of Emotional Style, and grouping the six dimensions into one second-order factor indicating Healthy Emotionality. A generalized least squares confirmatory factor analysis (CFA), conducted using AMOS 24 yielded good fit for this model, $\chi^2/df = 2.583$, GFI = .881, AGFI = .865, RMSEA = .047, 90% CI [.044, .050], suggesting that our theoretical model with six first-order factors and one second-order factor characterized the data in an appropriate (i.e., accurate and parsimonious) way. However, the standardized factor loadings for three items were either insignificant or very low ($\beta_s < .18$), leading us to remove those items from the scale. As a result, we were left with a 33-item scale, which again exhibited good fit to the data, $\chi^2/df = 2.696$, GFI = .887, AGFI = .870, RMSEA = .049, 90% CI [.046, .052]. All standardized regression weights in this model indicated moderate or strong relationship between the items and the first-order latent factors ($\beta_s > .41$, $ps < .001$) and between the first- and second-order latent factor ($\beta_s > .53$, $ps < .001$).

Next, we examined modification indices to identify items that load to more Emotional Style dimensions than the one they were intended for. Given our goal of creating a scale that captured the six dimensions of Emotional Style distinctly, we excluded two items that would have caused an overlapping of dimensions. This led us to a 31-item scale, which again displayed good fit to the data, 2.651, GFI = .896, AGFI = .880, RMSEA = .048, 90% CI [.

²Missing data imputations were performed in the subsequent studies as well.

³We should note that although the age range in our sample was relatively large (19–75 years), it still was a restricted range. Furthermore, the median age was 36, with participants 50 years old or older making up only 20.3% of the sample.

045, .052]. In this model too, all standardized regression weights indicated moderate or strong relationship between the items and the first-order latent factors ($\beta_s > .44$, $ps < .001$) and between the first- and second-order latent factor ($\beta_s > .53$, $ps < .001$).

At this stage, we had a scale with an uneven number of items per dimension. To even up the number of items in each subscale, for the dimensions consisting of more than four items, we identified items with the lowest factor loadings. However, factor loadings for these items did not differ too much from each other, and we did not want to select items exclusively on the basis of them. Thus, when an item was judged to be covering an important aspect of the dimension that was not being covered by the remaining items, we chose to leave that item and remove a more conceptually redundant one with a higher factor loading. At the end of this process, we arrived at a 24-item scale, with 4 items per dimension (see Appendix A). A generalized least squares CFA of the measurement model yielded good fit, $\chi^2/df = 3.178$, GFI = .908, AGFI = .888, RMSEA = .056, 90% CI [.051, .060], confirming the theoretically assumed structure of the scale. Factor loadings varied from .476 to .911 for the item-dimension paths and from .532 to .957 for the dimensions-overall score paths. Cronbach's alphas for the finalized 24-item scale and for each of the dimensions indicated good internal consistency, respectively .93 for the overall scale, .87 for Outlook, .91 for Resilience, .84 for Social Intuition, .81 for Self Awareness, .82 for Sensitivity to Context and .84 for Attention.

All six dimensions of Emotional Style were significantly correlated, and the relationship was especially strong for Outlook and Resilience ($r = .809$), emphasizing the close link between the capacities for recovering from negative emotion and sustaining positive emotion. Please refer to Table 1 for the factor loadings of items to their dimensions, as well as corrected item-total correlations within dimension. Table 2 depicts for each dimension factor loadings to the overall score (i.e., Healthy Emotionality), correlations with the overall score and descriptive statistics.

As the last step before finalizing our scale, we tested an alternative CFA model, one that grouped all 24 items in a single factor representing Healthy Emotionality. The fit between this model and the data was worse than the fit with our theoretically derived scale structure, $\chi^2/df = 5.106$, GFI = .848, AGFI = .819, RMSEA = .076, 90% CI [.072, .080]. This finding empirically confirmed the existence of the six distinct dimensions that make up Emotional Style.

In terms of its readability, the final scale had a satisfying Gunning fog index of 10.20, meaning that it would be easily understood by somebody with about 10 years of formal education (i.e., by a high school sophomore).

Study 2

Having reduced a larger item pool to a 24-item scale and having garnered initial support for the proposed structure of this scale in Study 1, the aims of Study 2 were threefold: (1) to confirm the adequacy of ESQ's factor structure in a second sample, (2) inspect if the scale and its subscales yielded any age and gender differences, and (3) to establish the convergent validity of the subscales that make up the ESQ using the Multitrait-Multimethod Matrix

approach (Campbell & Fiske, 1959). With these purposes, a large sample of participants were asked to complete the ESQ, together with several other measures assessing constructs we expected to be related to the ESQ dimensions. To assess the convergent validity of each of the six separate ESQ dimensions, we relied on different constructs and measures. This allowed us to simultaneously assess the discriminant validity of the ESQ dimensions. We expected that a measure used to assess the convergent validity of a certain dimension should correlate with other dimensions to a lesser degree. Below we elaborate on the constructs we used to validate each ESQ dimension.

Outlook.

Optimism is defined as a generalized expectancy that positive, rather than negative, things will happen to oneself (Scheier, Carver, & Bridges, 1994). We expected optimism to strongly relate to the *Outlook* dimension, as the ability to maintain positive expectancies vis-à-vis the future should parallel the ability to sustain positive emotions.

Resilience.

Resilience, as measured by the Brief Resilience Scale, is defined as “the ability to bounce back or recover from stress” (Smith et al., 2008). This closely overlaps with our conceptualization of Resilience; hence we used it for convergent validity purposes.

Social Intuition.

As we noted earlier, low levels of Social Intuition entail autism-like characteristics. Therefore, to validate this dimension we measured where participants fall on the autism spectrum, predicting a strong negative relationship between autism and Social Intuition.

Self-Awareness.

To validate the Self-Awareness dimension, we measured mindful attention awareness. We expected a strong positive correlation between these two constructs, reasoning that people skilled at being aware of and paying attention to the present should also score high in Self-Awareness. We expected the Self-Awareness dimension to also be strongly correlated with interoceptive awareness (i.e., awareness of internal body sensations).

Sensitivity to Social Context.

To evaluate the convergent validity of this dimension, we assessed participants’ tendency to engage in impression management. People high on the Sensitivity to Social Context dimension are more acutely aware of the expectations that govern social situations and more willing and/or able to modify their responses to these. Given this, we expected that they would also be more likely to engage in impression management.

Attention.

To ascertain the convergent validity of the Attention dimension, we employed another attention scale (Attentional Control Scale; Derryberry & Reed, 2002). This scale measures individual differences in focusing attention and in shifting attention between tasks. The

Attention dimension was also expected to be associated with mindful attention awareness, which involves attention to what is taking place in the present.

Method

Participants and Recruitment

Three hundred and seventy-seven American participants were recruited on Amazon's Mechanical Turk to complete an online survey in exchange for a small amount of money. Three participants who failed to respond to a large number of non-randomly distributed items were excluded from data analysis, resulting in a sample of 374 participants (202 females, 170 males, 2 "Other") with a mean age of 39.18 ($SD = 12.20$). Ethnically, 79.7% of the participants were White, 8.3% African American, 5.1% Asian American, 4.8% Hispanic, and 2.1% chose "Other".

Procedure and Materials

After giving their informed consent, participants completed the following questionnaires.

Emotional Style Questionnaire.—Participants responded to the 24-item ESQ. For each item, they indicated their agreement on a scale from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*).

Life Orientation Test - Revised.—To assess optimism, we used the Life Orientation Test-Revised (LOT-R). The scale, developed by Scheier et al. (1994), measures people's expectations regarding the favorability of future outcomes. On a 7-point scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*), participants indicated their agreement with statements such as "In uncertain times, I usually expect the best" and "If something can go wrong for me, it will."

Brief Resilience Scale (BRS).—The Brief Resilience Scale (Smith et al., 2008) consists of six statements such as "I have a hard time making it through stressful events" and "I usually come through difficult times with little trouble." Participants responded on a 7-point Likert scale (1 = *Strongly Disagree*; 7 = *Strongly Agree*).

Autism Spectrum Quotient (AQ-10).—Autism was measured with the 10-item Autism Spectrum Quotient scale developed by Allison et al. (2012). On a 7-point Likert scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*), participants responded to items such as "I find it difficult to work out people's intentions" and "I like to collect information about categories of things (e.g. types of car, types of bird, types of train, types of plant etc.)".

Mindful Attention Awareness Scale (MAAS).—On a scale from 1 (*Almost Never*) to 6 (*Almost Always*), participants responded to 15 items capturing awareness of and attention to what is taking place in the present (Brown & Ryan, 2003). Sample scale items included "I do jobs or tasks automatically, without being aware of what I'm doing" and "I find it difficult to stay focused on what's happening in the present."

Multidimensional Assessment of Interoceptive Awareness (MAIA).—MAIA is a multidimensional measure of interoceptive body awareness (Mehling et al., 2012). Its 32 items assess eight concepts related to interoceptive awareness (e.g., awareness of body sensations, awareness of the connection between body sensations and emotional states). Sample items include “I notice changes in my breathing, such as whether it slows down or speeds up” and “I notice how my body changes when I am angry.” Participants responded to this measure using a 7-point Likert scale (1 = *Strongly Disagree*; 7 = *Strongly Agree*).

Balanced Inventory of Desirable Responding (Impression Management subscale).—To measure impression management, the 20-item Impression Management subscale of the Balanced Inventory of Desirable Responding was employed (BIDR; Paulhus, 1991). This subscale aims to capture intentional distortions to portray oneself favorably to others and consists of items such as “I never cover up my mistakes” or “When I hear people talking privately, I avoid listening”. Participants responded on a 7-point Likert scale (1 = *Strongly Disagree*; 7 = *Strongly Agree*). Following scale instructions, the impression management score was calculated by counting the number of items for which participants gave extreme responses (i.e., “6” and “7”s).

Attentional Control Scale.—The Attentional Control Scale, developed by Derryberry and Reed (2002), measures individual differences in focusing attention and shifting attention between tasks. Participants responded on a 7-point Likert scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*) to 20 items such as “When I am working hard on something, I still get distracted by events around me” or “It is easy for me to alternate between two different tasks.”

Results and Discussion

Scale Psychometrics

This was the first time the 24 items constituting the ESQ were presented as a single, stand-alone measure. Thus, as a first step, we retested the proposed model of the scale. To reiterate, this model groups the 24 items into six first-order factors representing each dimension of Emotional Style, and the six dimensions into one second-order factor representing Healthy Emotionality. A generalized least squares CFA again yielded good fit for this model, $\chi^2/df = 2.038$, GFI = .888, AGFI = .863, RMSEA = .053, 90% CI [.046, .059], providing additional evidence for the structure of the scale. The scale exhibited excellent internal validity (Cronbach’s alpha = .92). For each of the ESQ dimensions, internal consistency information, descriptive statistics, and intercorrelations with other dimensions can be found in Table 3.

Age and Gender Differences

Analyses revealed a small but significant positive correlation between Healthy Emotionality (M = 4.99, SD = 0.92) and age, $r = .23$, $p < .001$. Age was significantly correlated with the Outlook ($r = .16$; $p = .002$), Resilience ($r = .17$; $p = .001$), Self-Awareness ($r = .16$; $p = .001$), Sensitivity to Context ($r = .21$; $p < .001$) and Attention ($r = .27$; $p < .001$) dimensions.³ This pattern of results is consistent with socioemotional selectivity theory, according to which

older people enjoy more stable and positive emotional lives relative to younger people (Carstensen, Fung, & Charles, 2003).

The ESQ also yielded some gender differences. Although this was a small effect, women ($M = 5.08$, $SD = 0.91$) scored significantly higher than men ($M = 4.88$, $SD = 0.92$) in overall Healthy Emotionality, $t(370) = -2.12$, $p = .035$, Cohen's $d = 0.22$. This difference was mainly driven by Social Intuition, $t(370) = -4.09$, $p < .001$, $d = 0.42$, and Sensitivity to Context, $t(370) = -3.30$, $p = .001$, $d = 0.34$. Gender differences for the other dimensions did not reach significance.

Convergent Validity Analyses

We organize our discussion of convergent validity around each dimension of the ESQ. For the complete matrix of correlations between the ESQ dimensions and each convergent validity measure, please refer to Table 4.

Outlook.—To establish the convergent validity of the Outlook dimension, we employed the Revised Life Orientation Test (LOT-R; $M = 4.65$, $SD = 1.51$; $\alpha = .93$), which assesses optimism. As predicted, a very strong correlation was observed between this scale and the Outlook dimension ($r = .86$). The other ESQ dimensions, with the exception of Resilience, exhibited much lower correlations, attesting to the discriminant validity of the subscale. As noted earlier, the abilities to sustain positivity and to recover from negativity are tightly intertwined; hence, the link between LOT-R scores and the Resilience dimension ($r = .72$) was not unexpected.

Resilience.—We had hypothesized that the Resilience dimension would show a high degree of convergence with resilience as captured by the Brief Resilience Scale ($M = 4.56$, $SD = 1.52$; $\alpha = .95$). In line with our expectations, the two measures correlated substantially ($r = .88$). While the highest correlation with the Brief Resilience Scale among the different ESQ dimensions was observed for the Resilience dimension, the Outlook dimension also displayed a high correlation ($r = .81$), corroborating the aforementioned close relationship between Resilience and Outlook.

Social Intuition.—To evaluate the convergent validity of the Social Intuition dimension, we had relied on the Autism Spectrum Quotient ($M = 3.28$, $SD = 0.74$; $\alpha = .65$). Consistent with our hypotheses, we observed a strong negative association between Social Intuition and autistic tendencies ($r = -.60$).

Self-Awareness.—We had predicted that the Self-Awareness dimension would show the strongest associations with mindfulness, as assessed by the Mindful Attention Awareness Scale (MAAS; $M = 4.38$, $SD = 0.92$; $\alpha = .93$) and interoceptive awareness, as assessed by the Multidimensional Assessment of Interoceptive Awareness (MAIA; $M = 4.76$, $SD = 0.80$; $\alpha = .92$). Supporting our predictions, Self-Awareness highly correlated with both MAAS ($r = .58$) and MAIA ($r = .58$). Inspecting the correlations between Self-Awareness and MAIA's eight subscales, we found that the subscales that were most closely associated with Self-Awareness were the ones that were conceptually most relevant to Self-Awareness, namely Attention Regulation (i.e., the ability to sustain and control attention to body sensations), r

= .55; Noticing (i.e., the awareness of body sensations), $r = .49$; and Emotional Awareness (i.e., the awareness of the connection between body sensations and emotional states), $r = .43$.

Sensitivity to Context.—To establish the convergent validity of the Sensitivity to Context dimension, we had employed the Impression Management subscale of the Balanced Inventory of Desirable Responding ($M = 6.49$, $SD = 4.61$; $\alpha = .87$). In keeping with our hypotheses, a close association was observed between Sensitivity to Context and the desire to manage impressions about oneself ($r = .50$). Sensitivity to Context was also found to be linked to scores on the Mindful Attention Awareness Scale ($r = .50$). We had noted that Sensitivity to Context can be considered as the outer-directed version of Self-Awareness. Therefore, this finding further supported the convergent validity of the subscale.

Attention.—We had used the Attentional Control Scale (ACS; $M = 4.59$, $SD = 1.06$; $\alpha = .93$) to test the convergent validity of this dimension. As expected, a substantial correlation was observed between ACS and Attention ($r = .77$). We had also anticipated an association with mindful attention and awareness, as measured by MAAS, which was also observed ($r = .68$).

To sum up, Study 2 has allowed us (1) to confirm the proposed structure of the ESQ and its psychometric adequacy in a second sample, (2) to establish basic demographic patterns of the scale, which revealed small age and gender effects, with relatively older participants and women scoring slightly higher on Healthy Emotionality, and finally (3) to demonstrate that the subscales of ESQ relate to theoretically relevant constructs in expected ways.

Study 3

The aim of Study 3 was to establish the relationship between ESQ and various indicators of well-being. Having obtained support for the construct validity of the ESQ dimensions in Study 2, our current focus was on establishing the construct validity of the overall scale as a stand-alone measure of Healthy Emotionality. If our scale validly assesses Healthy Emotionality, then we would expect ESQ scores to account for a large portion of variability in well-being outcomes, given that well-being, by definition, entails a healthy emotional life. We thus administered the ESQ together with a number of scales measuring psychological and physical health. The measures were selected to tap both eudaemonic (e.g., flourishing) and hedonic aspects (e.g., positive affect) of psychological well-being, as well as physical health and vitality. We also included measures of psychological ill-being (e.g., stress, anxiety, depression), predicting negative correlations with Health Emotionality.

An additional aim of Study 3 was to examine how the ESQ relates to Big Five personality. Based on our general assumption that Healthy Emotionality is adaptive and has positive consequences for the functioning of an individual, we expected it to be positively related to the Extraversion, Agreeableness, Conscientiousness, and Openness to Experience dimensions of the Big Five, and negatively related to the Neuroticism dimension. We anticipated a particularly strong negative relationship between Healthy Emotionality and Neuroticism, which emerges as one of the strongest negative predictors of psychological well-being (DeNeve & Cooper, 1998).

Participants and Recruitment

Three hundred and thirty-seven American participants were recruited on Amazon's Mechanical Turk and completed an online survey in exchange for a small monetary compensation. Four participants were removed from the data set due to having failed to complete a large number of non-randomly distributed items, leaving us with a sample of 333 participants (151 females, 180 males, 2 "Other") with a mean age of 36.93 ($SD = 10.65$). Ethnically, 71.5% of the participants were White, 10.2% African American, 9% Asian, 5.4% Hispanic, and 0.3% Pacific Islander. 3.3% chose "Other" and 0.3% did not specify their ethnicity.

Procedure and Materials

After giving their informed consent, participants completed the following questionnaires. (Please refer to Table 5 for the reliability information and descriptive statistics.)

Emotional Style Questionnaire.—Participants completed the ESQ, responding to 24 statements on a scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*).

Flourishing Scale.—The Flourishing Scale is an 8-item measure capturing respondents' self-perceived success in domains important to well-being, such as relationships, self-esteem, and purpose in life (Diener et al., 2010). Participants indicated on a Likert scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*) their endorsement of statements such as "I lead a purposeful and meaningful life" and "My social relationships are supportive and rewarding."

Satisfaction with Life Scale.—We measured one component of subjective well-being, namely global life satisfaction, with the 5-item Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). On a 7-point scale (1 = *Strongly Disagree*; 7 = *Strongly Agree*) participants responded to statements such as "In most ways my life is close to my ideal."

Positive and Negative Affect Schedule (PANAS) - General.—To assess the prevalence of positive and negative emotions, we used PANAS - General (Watson, Clark, & Tellegen, 1988). Participants were asked to indicate to what extent they *generally* feel certain negative and positive emotions. The scale consisted of 10 positive (e.g., attentive, enthusiastic) and 10 negative emotion words (e.g., upset, guilty). Responses could range from 1 (*Very slightly or not at all*) to 5 (*Extremely*).

Subjective Trait Vitality Scale.—Subjective vitality refers to a positive feeling of aliveness and energy, and is associated with both psychological and physical well-being. We used the 7-item Subjective Trait Vitality Scale (Ryan & Frederick, 1997) to capture trait-level subjective vitality. On a 7 point scale (1 = *Strongly Disagree*; 7 = *Strongly Agree*) participants responded to statements such as "I look forward to each new day" and "I don't feel very energetic."

Cohen-Hoberman Inventory of Physical Symptoms (CHIPS).—To assess physical health, we used the Cohen-Hoberman Inventory of Physical Symptoms (Cohen & Hoberman, 1983). CHIPS lists 33 common physical symptoms (e.g., back pain, cold, acne, nosebleed). Participants were given this list and asked to put a check mark next to each symptom that has bothered or distressed them “during the past two weeks including today.” The total number of symptoms they reported comprised their score on this measure, with higher scores indicating poorer health.

Depression, Anxiety, and Stress Scales (DASS-21).—To assess participants’ mental health, we used the short, 21-item form of the Depression, Anxiety, and Stress Scales (Henry & Crawford, 2005). This scale consists of 3 subscales, measuring Depression (e.g., “I felt that I had nothing to look forward to”), Anxiety (e.g., “I felt I was close to panic”) and Stress (e.g., “I found it hard to wind down”). Participants indicated how much the statement applied to them over the past week, on a scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*).

Big Five Inventory (BFI).—To measure dimensions of personality, we relied on the 44-item Big Five Inventory (John & Srivastava, 1999). On a scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*), participants rated the extent to which various statements apply to them, such as “Is outgoing, sociable” (*Extraversion*), “Is helpful and unselfish with others” (*Agreeableness*), “Does a thorough job” (*Conscientiousness*), “Worries a lot” (*Neuroticism*), and “Is curious about many different things” (*Openness to Experience*).

Results and Discussion

Scale Characteristics.—A generalized least squares CFA again yielded good fit for the model consisting of six first-order factors representing each Emotional Style dimension, and one second-order factor representing Healthy Emotionality, $\chi^2/df = 2.167$, GFI = .866, AGFI = .837, RMSEA = .059, 90% CI [.052, .066], adding to the accumulating evidence for the adequacy of the scale structure. The internal validity of the scale was excellent (Cronbach’s $\alpha = .92$), and internal reliabilities for the subscales ranged between .74 and .89. The small but significant correlation between Healthy Emotionality and age was replicated, $r = .19, p = .001$. The gender difference in Healthy Emotionality obtained in Study 2 did not reach significance in the current study ($p = .19$). However, gender differences for the Social Intuition and Sensitivity to Context subscales were replicated, with women scoring higher than men in Social Intuition, $t(329) = -3.56, p < .001, d = 0.40$, and in Sensitivity to Context, $t(329) = -3.23, p = .001, d = 0.36$.

Healthy Emotionality and Well-Being Indicators.—As can be seen in Table 5 (last column), Healthy Emotionality ($M = 4.88; SD = 0.98$) showed large associations with the various constructs capturing psychological well-being, such as Flourishing ($r = .69$), Satisfaction with Life ($r = .48$), Positive Affect ($r = .52$), and Subjective Vitality ($r = .62$). Indicators of compromised well-being, on the other hand, exhibited strong negative links to Healthy Emotionality, as with Negative Affect ($r = -.58$), Depression ($r = -.75$), Stress ($r = -.69$) and Anxiety ($r = -.55$). We also found a significant negative correlation between the number of somatic symptoms a person experienced in the past two weeks and their level of

Healthy Emotionality ($r = -.25$). Overall, the data made a strong case that ESQ accounts for a large amount of variability in well-being indicators, thereby demonstrating its construct validity as a stand-alone measure of healthy emotionality.

Inspecting the correlations between the well-being measures used in the study and individual dimensions of the ESQ (see Table 6), we notice that although all dimensions correlate significantly with various well-being indicators, the Outlook and Resilience dimensions exhibit the strongest associations, emphasizing the critical relevance of affective chronometry to psychological health.

Healthy Emotionality and Personality.—As depicted in Table 5, all Big Five dimensions correlated significantly with Healthy Emotionality. Among them, Neuroticism ($r = -.72$) was the strongest predictor, followed by Conscientiousness ($r = .66$) and Agreeableness ($r = .61$). While Extraversion ($r = .45$) and Openness to Experiences ($r = .35$) were also associated with Healthy Emotionality, this was to a relatively lesser degree. The associations of the Big Five with the six ESQ dimensions (presented in Table 6) are in theoretically expected directions and further contribute to establishing the construct validity of the individual dimensions.

Overall, Study 3 helped us arrive at two important conclusions: First, the ESQ strongly predicted well-being, as we would expect from any valid measure of healthy emotionality. Second, Healthy Emotionality as measured by the ESQ is closely related to Big Five personality. However, neither the ESQ as a whole, nor any of the ESQ dimensions were reducible to any single facet of the Big Five, and provided unique information.

Study 4

After having established the construct validity of ESQ in Studies 2 and 3, our aim for Study 4 was to assess its test-retest reliability. To accomplish this, participants who had previously completed the ESQ were contacted after 4 weeks and asked to complete it again.

Participants and Recruitment

Participants who completed Study 2 on Amazon's Mechanical Turk were contacted using the platform TurkPrime (www.turkprime.com/), and invited to participate in a study which they were told they qualified for, in exchange for a small monetary compensation. Two-hundred-and-ninety of the original 374 participants (77.5%) ended up accepting this invitation and successfully completing Study 4. This sample consisted of 138 males, 150 females, and 2 who identified their gender as "other", and had a mean age of 40.14 ($SD = 12.43$).

Procedure and Materials

Participants completed the 24-item ESQ on a 7-point Likert scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*), in addition to some basic demographic questions.

Results and Discussion

The Pearson correlation between Time 1 and Time 2 scores was calculated for overall Healthy Emotionality and the six subscales of the ESQ. Across an interval of 4 weeks, the test-retest reliability coefficient for Healthy Emotionality was .89, $p < .001$, suggesting very good reliability. The coefficients for the individual subscales ranged between acceptable and very good, being .89 for Outlook, .88 for Resilience, .78 for Social Intuition, .73 for Self-Awareness, .75 for Sensitivity to Context, and .85 for Attention (all p 's $< .001$).

Overall, these results indicated high test-retest reliability for the ESQ and its subscales over 4 weeks, and attested to the scale's psychometric adequacy.

General Discussion

Drawing from affective neuroscience, the current work introduced a theoretical framework to understand the ingredients of a healthy emotional life and presented the Emotional Style Questionnaire—a self-report measure to assess how people vary on the six dimensions making up healthy emotionality. The paper's main focus was on the development and validation of the ESQ, aimed to be a psychometrically solid measure to be used in research and clinical settings. In four studies (total $N = 1,705$), we have documented that the 24-item ESQ exhibits robust psychometric properties and is a valid and reliable measure of both overall Healthy Emotionality and the six dimensions making up Healthy Emotionality. Whereas the single Healthy Emotionality score assesses adaptive emotional functioning as a whole and strongly predicts overall psychological well-being, the six separate dimensions assess functioning in more fine-grained domains of emotional life. These dimension scores may be used to identify individuals' strengths and weaknesses in their emotional functioning and allow for more targeted well-being interventions.

Contributions to Understanding Psychological Well-Being

A healthy emotional life is a critical determinant of psychological well-being. The large empirical associations observed between the ESQ and the various well-being constructs included in our study (e.g., flourishing, positive and negative affect, vitality) were predicted by theory, and enhanced our confidence in the validity of the measure. It was also informative to behold the relationships between individual ESQ dimensions and well-being indicators. As would be expected, all dimensions were closely associated with well-being. However, the Outlook and Resilience dimensions exhibited the strongest links, underlining the primary relevance of affective chronometry (i.e., the temporal dynamics of emotional responding) to psychological health (Davidson, 2015). The ability to sustain positive emotions (Outlook) and the ability to recover from negative emotions (Resilience) together accounted for a large amount of variability in emotional health and psychological well-being. Although distinguishable from each other, these two dimensions were highly correlated in our data. For our scale, we still chose to keep them as separate dimensions, as they are conceptually different and are also based on different neural circuits. It stands to reason that the ability to recover quickly from negative emotion would facilitate the sustenance of positive emotion, and vice versa, yet the intricacies of the relationship between these two dimensions of affective chronometry still deserve more research.

Interestingly, after Outlook and Resilience, Attention was the Emotional Style dimension most robustly associated with well-being indicators. It is not often that Attention is brought up in the context of well-being, however, our findings point to a very close relationship between attentional skills and psychological and physical health. We consider this a contribution of our research to the understanding of well-being, and wish to encourage more researchers and practitioners to study attention in relation to well-being. In recent years, several studies have shown mindfulness meditation and related contemplative interventions to successfully increase attentional skills (e.g., Lutz, Slagter, Dunne, & Davidson, 2008; Mrazek, Franklin, Phillips, Baird, & Schooler, 2013; Tang et al., 2007). The brain circuits underlying Attention, just like the circuits underlying the other dimensions of Emotional Style, show considerable plasticity and should thus be amenable to interventions. We are looking forward to seeing more intervention research aimed at improving Attention with the goal of improving well-being.

Limitations and Future Research

The ESQ was designed as a brief and easily implementable self-report instrument for widespread use in research and clinical settings. However, self-report measures come with their own caveats, and their use should be complemented by other, potentially more objective measures whenever possible. Unlike some other self-report measures (e.g., grade point average, certain aspects of physical health), there is no gold standard against which to compare self-reports of healthy emotionality. That said, neural, physiological, and behavioral measures could be used to capture various dimensions of Emotional Style and validate the ESQ further. It is a limitation of the current work that the validation of the ESQ and its dimensions relied entirely on self-report measures. A major research direction for the future is to utilize neural, physiological, and behavioral measures to further test the construct validity of the scale.

Another limitation of our work is that we tested the ESQ only with American participants in online MTurk samples. It is imperative to provide evidence for the scale's reliability and validity in diverse populations and cultures. For future work, we also wish to examine the long-term predictive value of ESQ for positive and negative life outcomes. We hypothesize that the ESQ can be used for diagnostic purposes, such as identifying individuals who have a higher risk of developing psychopathology or who are more likely to succeed at school or work.

In Conclusion

At the foundation of psychological well-being lies a healthy emotional life. In this work, we elaborated on the different dimensions of affective style that make up such a life, informed by modern research in affective neuroscience and psychology, and developed a 24-item self-report scale to assess individual differences in healthy emotionality and its six dimensions. Initial evidence for the validity and reliability of the scale is very encouraging and suggests that the Emotional Style Questionnaire can be successfully used both to measure healthy emotionality and its components. We are looking forward to future research with the ESQ

and hope that it will contribute to efforts aimed at reducing suffering and improving well-being in the world.

Acknowledgments

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Appendix A

Emotional Style Questionnaire

Please indicate your agreement with the following statements using the scale below.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

1. When something good happens to me, the positive mood does not last long.
2. I find it hard to regain my calm after experiencing something negative.
3. When I am talking with people, I am always attuned to their emotional state.
4. There can be long periods of time when I am not conscious of my own bodily and emotional states.
5. I have sometimes been told that I behaved in a socially inappropriate way.
6. I have good concentration skills.
7. I am very good at seeing the positive side of things.
8. When I experience a setback, I do not stay upset for very long.
9. I am not particularly good at reading people's emotions.
10. I am typically very aware of my feelings, both in my mind and my body.
11. I have suffered setbacks at work or had falling outs with friends, because the way I acted was apparently not acceptable.
12. I do not get distracted easily, even in situations where a lot is going on.
13. I find it easy to be hopeful about the future.
14. When I'm in a bad mood, it tends to last a long time.
15. I am sensitive to other people's emotions.
16. I am not good at identifying my own feelings.
17. I have sometimes done things others thought of as tactless or embarrassing.
18. I sometimes feel like I have little control over where my attention goes.

19. When things are bad, I have a hard time believing that eventually they will work out.
20. I recover quickly when things don't go the way I want them to.
21. I can feel when something is bothering a person by just looking at them.
22. Usually, I am not attentive to what is going on in my body.
23. Oftentimes, when other people think something is inappropriate, I disagree.
24. If I get distracted by something, it takes me a long time to refocus.

Scoring:

Items marked with “r” are to be reverse-coded.

Outlook: 1r, 7, 13, 19r

Resilience: 2r, 8, 14r, 20

Social Intuition: 3, 9r, 15, 21

Self-Awareness: 4r, 10, 16r, 22r

Sensitivity to Context: 5r, 11r, 17r, 23r

Attention: 6, 12, 18r, 24r

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Public Significance Statement:

This study introduces Emotional Style Questionnaire—a 24-item measure of overall emotional health, which also provides more fine-tuned information about the 6 different dimensions underlying emotional health. This easily-implementable questionnaire can be used by anyone (e.g., researchers, clinicians) interested in understanding the emotional profile of a person.

Table 1

Psychometric Properties of the Emotional Style Questionnaire: Factor Loadings of Items to their Dimensions and Corrected Item-Total Correlations (within Dimension) in Study 1 (N = 708)

Item Number	Dimension	Factor Loading to Dimension	Corrected Item-Total Correlation (within Dimension)
1	Outlook	.687	.628
7	Outlook	.874	.771
13	Outlook	.847	.780
19	Outlook	.856	.746
2	Resilience	.806	.772
8	Resilience	.911	.836
14	Resilience	.817	.785
20	Resilience	.894	.821
3	Social Intuition	.694	.679
9	Social Intuition	.604	.609
15	Social Intuition	.695	.708
21	Social Intuition	.668	.670
4	Self-Awareness	.623	.638
10	Self-Awareness	.772	.642
16	Self-Awareness	.493	.596
22	Self-Awareness	.614	.668
5	Sensitivity to Context	.817	.705
11	Sensitivity to Context	.685	.647
17	Sensitivity to Context	.697	.684
23	Sensitivity to Context	.476	.546
6	Attention	.796	.694
12	Attention	.727	.604
18	Attention	.738	.664
24	Attention	.772	.704

Table 2

Factor Loadings of Dimensions to the Overall Score (i.e., Healthy Emotionality), Correlations with Overall Score and Descriptive Statistics in Study 1 (N = 708)

Dimension	Factor Loading to Overall Score	Correlation with Overall Score	Cronbach's α	M	SD
Outlook	.957	.842**	.87	4.75	1.43
Resilience	.945	.774**	.91	4.45	1.52
Social Intuition	.532	.563**	.84	5.05	1.13
Self-Awareness	.682	.718**	.81	5.30	1.21
Sensitivity to Context	.586	.716**	.82	4.94	1.33
Attention	.787	.806**	.84	4.88	1.30

Note.

** $p < .01$.

Table 3

Internal Consistency, Descriptive Statistics, and Intercorrelations for the Emotional Style Questionnaire Dimensions in Study 2 (N = 374)

Dimension	1	2	3	4	5	6
1. Outlook	—	.79**	.29**	.40**	.40**	.61**
2. Resilience		—	.15**	.30**	.37**	.62**
3. Social Intuition			—	.52**	.26**	.23**
4. Self-Awareness				—	.38**	.43**
5. Sensitivity to Context					—	.54**
6. Attention						—
α	.87	.89	.83	.74	.82	.85
M	4.91	4.46	5.19	5.43	5.05	4.89
SD	1.39	1.47	1.06	1.03	1.32	1.28

Note.

** $p < .01$.

Table 4

Correlations between the ESQ Dimensions and Measures in Study 2 (N = 374)

	Outlook	Resilience	Social Intuition	Self-Awareness	Sensitivity to Context	Attention
LOT-R	.86**	.72**	.25**	.33**	.33**	.54**
BRS	.81**	.88**	.19**	.29**	.37**	.61**
AQ-10	-.45**	-.41**	-.60**	-.48**	-.39**	-.50**
MAAS	.55**	.54**	.24**	.58**	.50**	.68**
MAIA	.50**	.46**	.46**	.58**	.23**	.48**
IM (BIDR)	.40**	.35**	.17**	.38**	.50**	.45**
ACS	.59**	.62**	.26**	.42**	.38**	.77**

Note. LOT-R = Life Orientation Test – Revised; BRS = Brief Resilience Scale; AQ-10 = Autism Spectrum Quotient; MAAS = Mindful Attention Awareness Scale; MAIA = Multidimensional Assessment of Interoceptive Awareness; IM (BIDR) = Impression Management subscale of the Balanced Inventory of Desirable Responding; ACS = Attentional Control Scale

** Correlation is significant at the 0.01 level (2-tailed).

Table 5

Descriptive Statistics for the Measures Used in Study 3 (N = 333)

	Cronbach's α	Mean	SD	Correlation with Healthy Emotionality
Flourishing Scale	.94	5.23	1.23	.69**
Satisfaction with Life Scale	.94	4.16	1.69	.48**
Positive Affect (PANAS)	.93	3.11	0.89	.52**
Negative Affect (PANAS)	.94	1.65	0.79	-.58**
Subjective Trait Vitality Scale	.93	4.44	1.41	.62**
CHIPS	—	4.80	5.49	-.25**
Depression (DASS-21)	.95	2.96	1.66	-.75**
Anxiety (DASS-21)	.89	2.53	1.38	-.55**
Stress (DASS-21)	.91	3.02	1.49	-.69**
Extraversion (BFI)	.89	3.72	1.36	.45**
Agreeableness (BFI)	.85	5.06	1.09	.61**
Conscientiousness (BFI)	.89	5.29	1.13	.66**
Neuroticism (BFI)	.92	3.51	1.48	-.72**
Openness to Experiences (BFI)	.88	4.94	1.11	.35**

Note. PANAS = Positive and Negative Affect Schedule; CHIPS = Cohen-Hoberman Inventory of Physical Symptoms; DASS-21 = Depression, Anxiety and Stress Scales; BFI = Big Five Inventory

** Correlation is significant at the 0.01 level (2-tailed).

Table 6

Correlations between the ESQ Dimensions and Measures in Study 3 (N = 333)

	Outlook	Resilience	Social Intuition	Self-Awareness	Sensitivity to Context	Attention
FS	.76**	.60**	.44**	.35**	.27**	.54**
SwLS	.58**	.46**	.28**	.17**	.18**	.37**
PA	.62**	.47**	.37**	.22**	.13*	.42**
NA	-.45**	-.47**	-.20**	-.42**	-.46**	-.47**
STVS	.76**	.64**	.28**	.27**	.19**	.48**
CHIPS	-.21**	-.26**	.05	-.13*	-.26**	-.20**
Depression	-.72**	-.62**	-.28**	-.51**	-.49**	-.55**
Anxiety	-.37**	-.44**	-.17**	-.43**	-.50**	-.43**
Stress	-.57**	-.64**	-.20**	-.42**	-.54**	-.55**
Extraversion	.56**	.51**	.26**	.18**	.07	.35**
Agreeableness	.52**	.41**	.48**	.41**	.47**	.38**
Conscientiousness	.48**	.46**	.31**	.46**	.44**	.68**
Neuroticism	-.69**	-.81**	-.21**	-.31**	-.38**	-.61**
Openness	.36**	.27**	.35**	.22**	.03	.33**

Note. FS = Flourishing Scale; SwLS = Satisfaction with Life Scale; PA = Positive Affect (PANAS); NA = Negative Affect (PANAS); STVS = Subjective Trait Vitality Scale; CHIPS = Cohen-Hoberman Inventory of Physical Symptoms

** Correlation is significant at the 0.01 level.

* Correlation is significant at the 0.05 level.

Table 7

Descriptive Statistics of the Emotional Style Questionnaire in Study 4 (N = 290)

Dimension	1	2	3	4	5	6
1. Outlook	—	.82**	.29**	.40**	.42**	.64**
2. Resilience		—	.20**	.30**	.40**	.67**
3. Social Intuition			—	.53**	.32**	.30**
4. Self-Awareness				—	.42**	.46**
5. Sensitivity to Context					—	.57**
6. Attention						—
α	.87	.89	.83	.81	.83	.86
<i>M</i>	4.85	4.54	5.14	5.40	4.98	4.95
<i>SD</i>	1.44	1.50	1.08	1.11	1.36	1.30

Note.

**
 $p < .01$.

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