Emotional norms for 524 French personality trait words

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Abstract Newly measured rating norms provide a database of emotion-related dimensions for 524 French trait words. Measures include valence, approach/avoidance tendencies associated with the trait, possessor- and other-relevance of the trait, and discrete emotions conveyed by the trait (i.e., anger, disgust, fear, happiness, and sadness). The normative data were obtained from 328 participants and were revealed to be stable across samples and gender. These data go beyond a dimensional structure and consider more fine-grained descriptions such as the categorical emotions, as well as the perspective of the evaluator conveyed by the traits. They should thus be particularly useful for researchers interested in emotion or in the emotional dimension of cognition, action, or personality. The database is available as supplementary material.

Keywords Discrete emotion · Normative data · Trait words · Type of valence

The last 2 decades have witnessed the growing importance of affective states in many areas of psychology. The study of affective states has led to the development and selection of material possessing an affective connotation: drawings, smells, pictures, movie excerpts, and words. Among these stimuli, words have been frequently used, since they provide structurally simple stimuli of rich semantic meaning and variability. With the aim of providing ready-to-use experimental material, researchers have developed normative databases of the emotionality of words in English (Bradley & Lang, 1999), as well as in other languages, such as German (Kanske & Kotz, 2010; Võ, Jacobs, & Conrad, 2006), Spanish (Redondo, Fraga, Padrón, & Comesaña, 2007), Portuguese (Soares, Comesaña, Pinheiro, Simões, & Frade, 2012), Finnish (Eilola & Havelka, 2010), and French (Bonin et al., 2003).

Yet normative studies for French remain relatively infrequent (see Bonin et al., 2003; Syssau & Monnier, 2009), for a language that is currently spoken in many countries all around the world (e.g., Boies, Lee, Ashton, Pascal, & Nicol, 2001). Notably, with few exceptions (e.g., Briesemeister, Kuchinke, & Jacobs, 2011; Stevenson, Mikels, & James, 2007), most of the studies assess words' emotionality through the measurement of word valence. Valence is undoubtedly a central dimension in emotional experience (e.g., Osgood & Suci, 1955; Russell, 1980; Smith & Ellsworth, 1985), but recent research indicates that it is not the sole, and sometimes not the most important, dimension of interest when the impact of affective stimuli is examined. Indeed, other dimensions seem to better account for the cognitive and behavioral consequences of exposure to affective stimuli. Thus, in the present normative study, we turned our attention to three additional dimensions that have been found to account for the impact of affective stimuli, sometimes over and above valence: the categorical (or "basic") emotion conveyed by the stimulus, the associated behavioral tendencies (i.e., approach vs. avoidance), and the expected consequences of the stimulus, as primarily relevant for the self versus others. We briefly describe each of these dimensions and their relevance for psychological research on affect and evaluation.

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Dimensions of interest

Categorical emotions

The debate about the structure of emotion opposes two main positions. According to the dimensional view, emotions cannot be distinguished on the basis of their nature but on specific dimensions on which they vary. Typically, these dimensions include valence and arousal (e.g., Russell, 1980). This position is challenged by a categorical view of basic emotions that hypothesizes the existence of a small set of distinct and irreducible emotional processes (e.g., Panksepp, 1998; Plutchik, 1984). Although theorists differ in the number of basic emotions that should be considered, they generally include anger, disgust, fear, happiness, and sadness (e.g., Ekman, 1999; Izard, 2009; Oatley & Johnson-Laird, 1987; Plutchik, 1984; Tomkins, 1984).

The question of the structure of emotional experience is beyond the scope of this article. When the emotionality of stimuli is measured, however, it appears useful to assess the categorical emotion they convey, because this sometimes accounts for the reactions to this stimulus better than does valence. For instance, forecast about ambiguous future events is predicted better by the certainty associated with the affective state currently experienced by the participants than by its valence (Lerner & Keltner, 2001). As a result, happy and angry participants (anger and happiness being associated with certainty appraisals) make similarly more optimistic predictions than do fearful participants (fear being associated with uncertainty). In a similar vein, participants respond faster to emotional stimuli with an approach movement when it is associated with happiness and anger than when it is associated with fear and sadness (the effect being reversed when participants respond with an avoidance movement; Alexopoulos & Ric, 2007). Other research on various areas of judgment, such as risk estimation (DeSteno, Petty, Wegener, & Rucker, 2000; Keltner, Ellsworth, & Edwards, 1993), stereotyping (Bodenhausen, Sheppard, & Kramer, 1994; Tiedens & Linton, 2001), prejudice (Cottrell & Neuberg, 2005), persuasion (Moons & Mackie, 2007), and consumer decision making (Han, Lerner, & Keltner, 2007), has revealed that the impact of negative emotions or stimuli can vary to a great extent depending on which specific emotion (e.g., anger vs. fear) the situation or the stimuli are eliciting. Thus, in the present study, we assessed the extent to which words conveyed anger, disgust, fear, happiness, and sadness.[1]

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[1] Surprise has not been included because it is sometimes considered as a neutral cognitive state (e.g., Ortony & Turner, 1990) and not as an emotion. As a result, surprise does not appear in some classifications of basic emotions (Ekman, 1999; Izard, 2009; Oatley & Johnson-Laird, 1987).

Action tendencies

There is a general agreement among researchers to define emotion as component processes (e.g., Keltner & Gross, 1999; Niedenthal, Krauth-Gruber, & Ric, 2006). Among these components, one seems to be of high importance for the organism's well-being and survival: the ability to approach or avoid specific stimuli. This dimension can be conceived of as referring to the motivational orientation component of emotion (e.g., Krieglmeyer, Deutsch, De Houwer, & De Raedt, 2010). Although this dimension is highly correlated with valence (e.g., Chen & Bargh, 1999; Krieglmeyer et al., 2010), research indicates that they should not be confounded. First, action tendencies are specifically related to categorical emotions in such a way that negative stimuli may have different motivational implications depending on the emotion they convey. For instance, whereas fear is associated with avoidance, anger is typically associated with approach (in order to remove obstacles in goal attainment; e.g., Carver & Harmon-Jones, 2009; Frijda, Kuipers, & ter Schure, 1989; Plutchik, 1984). Thus, the behavioral consequences should be different depending on whether the stimulus conveys fear or anger. In line with this view, recent studies (Alexopoulos & Ric, 2007) have indicated that stimulus words associated with happiness or anger (both associated with approach) are responded to faster by a movement implying arm flexion (i.e., an approach behavior; e.g., Cacioppo, Priester, & Bernston, 1993) than are stimulus words associated with fear or sadness (both associated with avoidance).

Second, research indicates that the relationship between valence and action tendencies can be moderated by other factors, such as the perspective of the evaluator (Peeters, 1983; Wentura, Rothermund, & Bak, 2000). This dimension will be further presented in the next section.

All in all, these findings suggest that action tendencies in terms of approach and avoidance should not be considered as direct responses to valence and, thus, cannot be equated with this dimension. Therefore, and given the importance of approach tendencies in motivated behavior, it appears important to evaluate this dimension independently of valence.

Possessor- versus other-relevance

Trait words can be distinguished on whether, on the one hand, they have *unconditional* positive or negative implications for the possessor of the trait (e.g., intelligent, depressed) or, on the other hand, they have *unconditional* positive or negative implications for the person who is interacting with the trait holder (e.g., honest, cruel; Peeters, 1983; Wentura et al., 2000). People can rapidly distinguish whether trait words mainly have implications for the possessor of the trait or for the person who is

interacting with the possessor of the trait. In support of this, Wentura and Degner (2010) demonstrated that affective priming was more effective when the prime and the target were both possessor- or other-relevant than when they did not belong to the same category. This result suggests that aside from valence, affective stimuli also convey the type of relevance. Other research reveals that this dimension could also have important judgmental and behavioral consequences. For instance, Wentura and colleagues have demonstrated that behavioral approach or avoidance is far more marked for traits having implications for the person who is interacting with the trait holder and that reactions to other-relevant stimuli are better predictors of prejudice and discrimination toward specific outgroups (e.g., Turks for German participants; Degner & Wentura, 2011; Degner, Wentura, Gniewosz, & Noack, 2007). These findings thus indicate that possessor- versus other-relevance of trait words is a dimension of great interest in order to further understand people's reactions to emotional stimuli.

A focus on trait words

In this study, we focused on trait words, since they represent a homogeneous, still very large category of adjectives, the structure of which has been widely studied in previous research because of its implications for both personality description (e.g., Goldberg, 1990; for an analysis of the French personality lexicon, see Boies et al., 2001) and social judgment (e.g., Anderson, 1968). Trait words are indeed useful tools for conveying information about others with potentially great consequences in real and symbolic interactions (e.g., person evaluation, expression of prejudice). As a result, they have frequently been used in experimental research both to induce evaluative or descriptive categorization (e.g., Higgins, Bargh, & Lombardi, 1985; Srull & Wyer, 1979; Wentura & Degner, 2010) and to measure impressions about a target (e.g., Willis & Todorov, 2006). Therefore, a normative study of the emotionality of trait words should be of great use for researchers interested in trait ascription, as well as those interested in the judgmental and behavioral consequences of such trait ascriptions.

Method

Participants

Three hundred forty-eight undergraduate students enrolled in three different French universities received partial course credit or monetary compensation (10 euros) in exchange for their participation in the study. The data from 20 participants were excluded from the sample because they were not French native speakers ($n = 19$) or because of a high proportion of missing data (more than 20 %; $n = 1$). Each University contributed approximately one third (Bordeaux, $n = 110$; Paris Descartes, $n = 110$; and Grenoble II, $n = 108$) to the sample of the remaining 328 participants (259 women and 69 men; mean age = 20.76 years). These were randomly assigned to one of the four questionnaire conditions. The full list of words is provided as supplementary material and can also be downloaded at the following address: http://webcom.upmf-grenoble.fr/LIP/Share/EmotionalNorms.

Procedure

Participants were run in groups of up to 10, with the restriction that each type of questionnaire was filled in each session. The completion lasted from about 45 min to 1 h 15 min, depending on the questionnaire participants received. The questionnaire contained 524 personality trait words selected on the basis of previous research (Anderson, 1968; Boies et al., 2001; Wentura et al., 2000) and brainstorming. We excluded from our list the traits that were highly infrequent as well as redundant. The 524 remaining words were presented to the participants in the form of a printed list in one of five randomly determined orders. Participants were asked to rate the 524 personality trait words on one of the four dimensions.

A first group of participants ($n = 80$) rated the valence of the words (VAL). Participants had to indicate to what extent each trait was positive or negative. They answered by circling the appropriate number on a 7-point scale ($-3 = $ *extremely negative*; $+3 = $ *extremely positive*), with 0 indicating that the word was neither positive nor negative. A second group ($n = 89$) rated the consequences for the possessor of the trait (PCONS) and the consequences for others interacting with the trait holder (OCONS). Concerning the PCONS, participants indicated to what extent possessing such a trait would have consequences for the person who possesses it. Concerning OCONS, they indicated to what extent possessing the trait would have consequences for people encountering and interacting with the trait holder. They gave their estimations on two 7-point scales (1 = *low consequences*; 7 = *high consequences*). The third group ($n = 80$) assessed the behavioral tendencies toward a person possessing the trait. Participants indicated to what extent they would avoid ($-3 = $ *strong avoidance*) or approach ($+3 = $ *strong approach*) a person possessing the trait, with 0 indicating no specific behavioral tendency. The fourth group ($n = 79$) evaluated the categorical emotions conveyed by the traits. For each trait, participants indicated to what extent it conveyed anger, disgust, fear, happiness, and sadness on five 7-point scales (1 = *does not convey this emotion at all*; 7 = *strongly conveys this emotion*). When the questionnaire was completed, the experimenter answered the

participants' questions and thanked them for their participation.

Results

The response rate was 99.4 % (> 89.8 % for all traits and all dimensions) and suggests that the trait words were known to the participants and that the dimensions of evaluation were meaningful. Table 1 presents an illustration of the measures, as well as trait word frequencies in books and in movies' subtitles (taken from LEXIQUE 3.80; http://www.lexique.org; New, Brysbaert, Veronis, & Pallier, 2007; New, Pallier, Brysbaert, & Ferrand, 2004; New, Pallier, Ferrand, & Matos, 2001), for the six first and last alpha-ordered trait words as they appear in the database.

Stability of the evaluations

Stability of evaluations was assessed by computing, for each dimension, the mean correlations between trait word evaluations across the three university samples and across gender. The evaluations were quite stable for all the dimensions across university samples: valence (mean $r = .98$), action tendencies (mean $r = .97$), consequences for the trait holder (mean $r = .80$), consequences for others (mean $r = .91$), and emotions (all mean rs > .91). High consistencies were also observed between men and women: valence ($r = .98$), action tendencies ($r = .95$), consequences for the trait holder ($r = .77$), consequences for others ($r = .89$), and emotions (all mean rs > .82). Given the high stability of the data, they were averaged across universities and gender for subsequent analyses.

Relationships between emotional dimensions

An exploration of the relationships between the dimensions under study showed that these dimensions were highly intercorrelated (see Table 2). The analysis also revealed several points of interest. First, we observed a negative correlation between the level of anger conveyed by a trait and the tendency to approach a person possessing the trait ($r = -.82$), which argues against the theoretically expected positive relationship between anger and approach (e.g., Alexopoulos & Ric, 2007; Carver & Harmon-Jones, 2009; Frijda et al., 1989). Second, we found that linguistic dimensions such as trait frequency (as measured either in books or in movies' subtitles) were positively correlated with several dimensions—namely, with approach tendencies ($r = .11$ and .13, ps < .02, for books and subtitles, respectively) and happiness (rs = .09 and .13, ps < .04, for books and subtitles, respectively). Valence was also significantly correlated with frequency as measured in movies' subtitles ($r = .11$, $p < .02$).

This correlation approached significance when the trait frequency was measured in books ($r = .08$, $p < .09$).[2] Even though these correlations are modest, they again suggest that the "effects" of linguistic dimensions, such as word frequency, can be partially accounted for by emotionality and that researchers should take into account this dimension in their analyses (e.g., Zajonc, 1968).

The role of possessor- versus other-relevance

Another point of interest concerns the moderating role of the possessor- versus other-relevance dimension. We tested Wentura et al.'s (2000) predictions that action tendencies of approach and avoidance should be better predicted by valence when the traits are perceived to have consequences for those who interact with the trait holder rather than when they have consequences for the trait holder. To do so, we computed a multiple regression analysis having action tendencies associated with a trait as the criterion and VAL, PCONS, OCONS, and the interactions between valence and both kinds of consequences as predictors. As was already observed in the correlation analysis, valence predicted approach tendencies, $B = 0.83$, $F(1, 518) = 8,516$, $p < .001$, $\eta_p^2 = .94$. However, this relationship was moderated by the perceived consequences of the trait for the trait holder (PCONS), $B = -0.09$, $F(1, 518) = 32.47$, $p < .001$, $\eta_p^2 = .06$, as well as the consequences of the trait for others (OCONS), $B = 0.11$, $F(1, 518) = 167.14$, $p < .001$, $\eta_p^2 = .24$. Consistent with Wentura and colleagues' predictions, the relationship between valence and behavioral tendencies increased as the trait was perceived as having more consequences for the person interacting with the trait holder, whereas this relationship became weaker as the trait was perceived as having more consequences for the trait holder. More generally, we observed that trait relevance moderates the relationships between the specific emotions conveyed by the trait and the behavioral tendencies (see Table 3). Taken together, these findings attest to the importance of this dimension in affective reactions toward, at least, other persons.

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[2] We completed this analysis by testing the quadratic relationship between word frequency and valence. The results of these multiple regression analyses (with word frequency as the criterion and valence as the predictor) reveal a linear trend for subtitles and for books, $B = 5.57$, $t(520) = 2.88$, $p < .01$, $\eta_p^2 = .02$, and $B = 2.09$, $t(520) = 1.83$, $p < .07$, $\eta_p^2 = .006$, respectively. The quadratic trend appears significant only when frequency was estimated from subtitles, $B = 3.48$, $t(520) = 1.99$, $p < .05$, $\eta_p^2 = .008$. This trend is far from significant when frequency is estimated from books, $t < 1$, $p = .52$. Thus, taken together, our results would be more supportive of a linear than of a quadratic relationship between word valence and word frequency.

Table 1 Presentation of the main measures included in the database for the first six and the last six trait words

Trait	Translation	FqMovies	FqBooks	Val	PCONS	OCONS	App
Accessible	Approachable	1.49	4.12	1.44 (1.09)	4.19(1.61)	4.87 (1.79)	1.58 (0.96)
Accueillant	Welcoming	1.21	1.82	2.14 (0.81)	4.19 (1.72)	5.32 (1.75)	2.13 (0.92)
Actif	Active	4.12	3.58	1.9 (0.82)	5.00 (1.64)	3.70 (1.75)	1.71 (1.06)
Admirable	Admirable	6.02	23.92	2.19 (0.99)	4.48 (1.83)	4.78 (1.86)	1.72 (1.06)
Admiratif	Appreciative	0.26	2.57	0.80 (1.74)	4.88 (1.64)	4.01 (1.90)	1.08 (1.27)
Adorable	Adorable	23.00	6.28	2.14 (0.94)	4.03 (1.82)	5.09 (1.77)	2.04 (0.97)
(…)							
Vigilant	Mindful	1.73	1.82	1.44 (0.93)	4.83 (1.80)	3.80 (1.83)	1.06 (1.09)
Vigoureux	Vigorous	2.05	6.35	1.4 (1.09)	4.65 (1.75)	3.28 (1.74)	1.20 (1.03)
Violent	Violent	12.84	19.39	−2.46 (0.93)	5.91 (1.26)	6.43 (0.89)	−2.35 (0.99)
Vivace	Vivacious	0.35	3.58	1.38 (0.89)	4.61 (1.63)	3.53 (1.75)	1.05 (1.12)
Vivant	Lively	76.38	41.15	2.10 (0.96)	4.78 (1.99)	4.09 (2.05)	2.05 (0.90)
Vulgaire	Vulgar	8.48	12.84	−2.04 (1.12)	5.40 (1.41)	5.82 (1.45)	−1.57 (1.42)
Trait	Translation	Anger	Disgust	Happiness	Fear	Sadness	
Accessible	Approachable	1.13 (0.47)	1.18 (0.62)	2.86 (2.06)	1.25 (0.76)	1.05 (0.22)	
Accueillant	Welcoming	1.03 (0.23)	1.08 (0.68)	4.87 (1.81)	1.11 (0.48)	1.03 (0.16)	
Actif	Active	1.22 (0.61)	1.09 (0.43)	3.59 (2.06)	1.27 (073)	1.14 (0.61)	
Admirable	Admirable	1.14 (0.47)	1.08 (0.35)	4.38 (2.11)	1.16 (0.65)	1.06 (0.33)	
Admiratif	Appreciative	1.14 (0.47)	1.10 (0.34)	3.58 (2.03)	1.29 (0.91)	1.21 (0.81)	
Adorable	Adorable	1.06 (0.46)	1.08 (0.38)	5.01 (1.89)	1.15 (0.56)	1.06 (0.40)	
(…)							
Vigilant	Mindful	1.15 (0.58)	1.78 (0.73)	2.17 (1.65)	2.22 (.86)	1.22 (0.71)	
Vigoureux	Vigorous	1.29 (0.93)	1.10 (0.44)	2.74 (1.99)	1.40 (1.11)	1.13 (0.57)	
Violent	Violent	6.08 (1.38)	4.06 (2.38)	1.05 (0.22)	4.12 (2.53)	2.88 (2.40)	
Vivace	Vivacious	1.32 (0.82)	1.12 (0.46)	2.95 (2.08)	1.34 (0.99)	1.22 (0.88)	
Vivant	Lively	1.54 (1.34)	1.42 (1.22)	4.51 (2.20)	1.76 (1.55)	1.64 (1.42)	
Vulgaire	Vulgar	4.04 (2.34)	4.83 (1.90)	1.06 (0.34)	1.82 (1.62)	2.36 (2.16)	

FqMovies = frequency in movie subtitles; FqBook = frequency in books; Val = valence; PCONS = perceived consequences for the possessor; OCONS = perceived consequences for others. Standard deviations are given within parentheses

Table 2 Pearson's correlation between the measures

	1	2	3	4	5	6	7	8	9
1. Frequency (books)	−								
2. Valence	.08	−							
3. PCONS	−.01	−.42**	−						
4. OCONS	−.07	−.39**	.29**	−					
5. Approach	.11*	.97**	−.38**	−.39**	−				
6. Anger	−.06	−.81**	.46**	.58**	−.82**	−			
7. Disgust	−.05	−.83**	.38**	.53**	−.84**	.85**	−		
8. Happiness	.09*	.84**	−.30**	−.11*	.84**	−.64**	−.64**	−	
9. Fear	−.01	−.62**	.52**	.24**	−.57**	.52**	.46**	−.58**	−
10. Sadness	.08*	−.71**	.47**	.19**	−.64**	.54**	.56**	−.61**	.62**	−

* *p* < .05
** *p* < .01

Table 3 Behavioral tendencies (approach) as predicted by emotion conveyed by the trait and consequences for the trait holder (PCONS) and for others (OCONS)

	Predictor of Approach Tendencies				
	Emotion	PCONS	OCONS	Emotion × PCONS	Emotion × OCONS
Anger	−1.25**	10.05	0.24**	0.31**	0.11**
Disgust	−1.41**	−0.14*	0.14**	0.30**	0.13**
Fear	−1.06**	−0.08	−0.32**	0.59**	−0.27**
Happiness	0.83**	−0.09	−0.38**	0.05	0.18**
Sadness	−1.02**	−0.16	−0.30**	0.47**	−0.29**

Values are unstandardized regression coefficients

* $p < .05$

** $p < .01$

Valence–emotion relationships

Finally, we used the database to explore how valence was related to discrete emotions in trait evaluation. As can be seen in Table 2, the five discrete emotions conveyed by a trait predicted its valence. However, partial correlations revealed that discrete emotions contribute in a different way to valence. The greatest contributions are for happiness, $B = 0.50$, $t(518) = 18.09$, $p < .001$, $\eta_p^2 = .39$, and disgust, $B = −0.51$, $t(518) = 10.74$, $p < .001$, $\eta_p^2 = .18$. Sadness, $B = −0.30$, $t(518) = 8.41$, $p < .001$, $\eta_p^2 = .12$, anger, $B = −0.22$, $t(518) = 5.63$, $p < .001$, $\eta_p^2 = .06$, and fear, $B = −0,08$, $t(518) = 2.16$, $p < .04$, $\eta_p^2 = .01$, appeared to contribute in a weaker way. These results suggest that the valence of a trait is better accounted for by the degree of happiness conveyed by that trait than by any other emotional dimension.

Discussion

The aim of the present ratings was to provide emotional norms for French trait words. The number of normative studies of French lexicon is relatively limited, and these studies generally restrict emotionality to valence (e.g., Bonin et al., 2003; Syssau & Monnier, 2009). Our study departs from this work by providing norms for discrete emotions for words. This could be particularly useful because researchers claim that this level of analysis should be more predictive of behavior than the dimensional accounts (e.g., Carver & Harmon-Jones, 2009; Panksepp, 1998). Even though there is no definite evidence in favor of one or the other conception, the availability of such normative data could contribute to the debate.

Our study also provides norms for other emotion-related dimensions, such as approach/avoidance and perceived consequences that have recently appeared to play a crucial role in research on emotions and on their consequences in perception, cognition, and action (e.g., Wentura & Degner, 2010; Wentura et al., 2000). Thus, these norms should be useful for researchers exploring the emotional dimensions through exposure to words. Of course, the database should be of particular interest to those who work on the French lexicon, but it can serve also as a basis for linguistic comparisons, as well as for exploration of the interplay between the various emotional dimensions.

Our results indicate that our data are stable. Moreover, we were able to replicate psychology literature findings, such as the relationship between word frequency and positivity (e.g., Zajonc, 1968), measured here in terms of valence, happiness, and approach tendencies. We also replicated the moderating role of possessor- versus other-relevance of trait on action tendencies (Wentura et al., 2000). Importantly, our data suggest that this dimension strongly moderates most of the relationship between emotion and approach tendencies and deserves more attention in emotion research.

Finally, we observed a negative correlation between the anger conveyed by a trait and the tendency to approach the trait holder. This correlation is consistent with dimensional views of emotion structure (e.g., Watson, Clark, & Tellegen, 1988) and can be perceived as being at odds with theoretical positions considering anger as an emotion related to approach behavior, with the aim of restoring a desired state (Carver & Harmon-Jones, 2009). However, it is also plausible that the kind of measurement we relied on, based on self-report, constrained the participants' responses and made them rely on their lay theories concerning their own functioning (e.g., Feldman-Barrett, Robin, Pietromonaco, & Eysell, 1998). This issue is beyond the scope of this article, but it questions our reliance on self-report in normative data and calls for future research directly comparing self-report with other measures of the same constructs (e.g., chronometric studies). We hope that these normative data will contribute to further research by providing a quick and easy access to emotion-related material to researchers interested in personality, emotion, impression formation, or automatic evaluation.

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