# What's in an emotion word? The multiple roles of labeling in emotional functioning and well-being

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## Abstract

The idea that labeling emotions with specific words benefits emotional functioning and well-being has a long history in psychological research. How people represent affective experiences verbally is a window into how they represent them mentally, and emotion words are an efficient means of conceiving and communicating how one feels, why one might feel that way, what might be done about it, and more. By many accounts, the fluid and precise use of emotion words is associated with the extent to which one is aware of emotions, experiences them as nuanced and context-specific, and can effectively regulate them. A large and growing literature attests that these aspects of emotional functioning are predictive of outcomes related to well-being, including positive mood, life satisfaction, and mental and physical health. At

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the same time, the exact link between emotion words on one hand, and emotional functioning and well-being on the other, varies across psychological constructs and theoretical frameworks. As reviewed in this chapter, there are multiple roles that labeling may play in subsequent experiences and behaviors. Critically, labeling may not always be the hero. There are circumstances in which using (more) words for emotion may not be adaptive or healthy. Future research can seek to reconcile these mixed findings by more fully accounting for the contexts in which emotion words are used.

## 1. Introduction

The encouragement (or admonishment) to "use your words" to describe affective experience is ubiquitous in contemporary discourse and is frequently referenced in the first sentence of scientific articles on language and emotion. This phrase gives voice to the common-sense belief that articulating feelings is a more measured and mature way of coping and navigating social relationships than is either suppressing those feelings or acting on them through other (more problematic) behavioral means. Labeling emotions with words like "angry", "sad", or "worried" is an efficient means of sharing one's perspective with others (Wood, Lupyan, & Niedenthal, 2016): Such labels communicate not only how one feels, but why one might feel that way, what might be done about it, and more. Telling someone that you are "sad" will likely elicit a different kind of response than telling them you are "angry". Each word carries its own story about the event in question. "Sad" focuses on loss, lack, or hurt, implying a need for comfort or redress; "angry" focuses on obstruction, challenge, or inequity, implying a need for argument or apology. These stories are part of a shared system of meaning, such that labeling affective experiences makes them meaningful in ways that others can understand.

That emotion words serve an interpersonal function is intuitive and fits with broader understandings of how language works to structure interactions and maintain relationships. Yet emotion words also serve an intrapersonal function—they tell a story to oneself in addition to whomever else may be listening (for discussion, see Lupyan & Clark, 2015). Applying labels to feelings effectively categorizes them, instantiating them in the mind and in the world as moments of anger, sadness, worry, and more (Hoemann, Xu, & Barrett, 2019; Katz, 1980; Lieberman et al., 2007). How people represent affective experiences verbally is a window into how they represent them mentally, with many theoretical frameworks proposing that

emotion language is intertwined with overall emotional functioning. According to these accounts, the fluid and precise use of emotion words is associated with the extent to which one is aware of emotions, experiences them as nuanced and context-specific, and can effectively regulate them (e.g., Bagby, Parker, & Taylor, 1994; Barrett, 2004; Gratz & Roemer, 2004; Lane, Quinlan, Schwartz, Walker, & Zeitlin, 1990). As a large and growing literature attests, these aspects of emotional functioning are predictive of outcomes related to well-being, including positive mood, life satisfaction, and mental and physical health (for reviews, see Bermond, Oosterveld, & Vorst, 2015; Hoemann, Nielson, et al., 2021; Thompson, Springstein, & Boden, 2021). At the same time, the exact link between emotion words on one hand, and emotional functioning and well-being on the other, varies across constructs and frameworks. There are multiple roles that labeling may play in subsequent experiences and behaviors. Critically, labeling may not always be the hero. By some accounts and in some contexts, using (more) words for emotion may not be adaptive or healthy.

In this chapter, I outline 4 ways in which emotion words are thought to relate to emotional functioning and, ultimately, well-being: by (1) symbolizing and (2) regulating affective experience, and by reflecting (3) concepts for and (4) attention to emotion. These processes are proposed, respectively and most clearly, by the literatures on alexithymia, affect labeling, emotional granularity, and active emotion vocabularies-literatures that have evolved more or less independently, and do not necessarily align. Research on alexithymia began earliest and focuses on overall deficits in emotion word use, following from a psychoanalytic tradition in which these words are a means of converting unresolved conflicts into integrated, manageable experiences (i.e., symbolizing them; Lesser, 1981; Taylor, 1984). Modern-day studies of alexithymia regard it in terms of emotional information processing, and generally find that it is related to reduced memory for, and application and generation of, emotion words (e.g., Donges & Suslow, 2017; Wotschack & Klann-Delius, 2013). Research on affect labeling, in turn, examines the impact of applying emotion words as a means of regulating momentary experience. This research started from the observation that labeling can reduce negative affect (Torre & Lieberman, 2018) but has since found that this effect varies considerably with experimental design and that labeling may even have "undesirable" consequences (e.g., increased negative affect, decreased positive affect, inhibited emotion regulation; Constantinou, Panayiotou, & Theodorou, 2014; Nook, Satpute, & Ochsner, 2021; Ortner, 2015). The exact mechanism(s) by which labels may regulate ongoing experience, then, are undetermined.

In contrast to research on alexithymia and affect labeling—which has predominantly used structured, lab-based tasks to assess the function of emotion words—research on emotional granularity and active emotion vocabularies has prioritized methods that can be used in more naturalistic conditions. In studies of emotional granularity, participants' freely-generated labels for their own emotional experiences have been coded for specificity and nuance (Ottenstein & Lischetzke, 2019; Williams & Uliaszek, 2021), under the premise that more precise and differentiated experiences are associated with desirable behaviors and outcomes (O'Toole et al., 2020; Thompson, Springstein, et al., 2021). These language-based measures of granularity, however, are not related to the traditional measure based on emotion intensity ratings, raising deeper questions about whether words or rather underlying knowledge structures (i.e., concepts) are more vital to emotional functioning and well-being (Barrett, 2004). In recent work on active emotion vocabularies, emotion words are taken to reflect not just concepts for emotion, but attention dedicated to emotional dimensions of experience. Accordingly, using a greater diversity of negative emotion words (whether in reference to oneself, another, or the world in general) signals a current or habitual focus on the negative, and so should be associated with negative outcomes like ill-health—whereas the opposite should be true for positive emotion words (Vine, Boyd, & Pennebaker, 2020). These predictions have received empirical support, but (like some findings from the affect labeling literature) nevertheless appear at odds with the idea, prevalent in science as in life, that labeling emotions is fundamentally good.

In the sections that follow, I summarize the theoretical framework(s), psychological construct(s), and relevant findings associated with the four processes linking emotion words to emotional functioning and well-being, for each identifying key observations as well as apparent discrepancies and outstanding questions. Then, I integrate across the proposed roles for emotion labeling by comparing the assumptions they make about the nature of emotion knowledge and experience. I conclude by offering considerations for future research, including how the study of emotion words might be approached in a more context-specific and culturally sensitive manner, and how such approaches may shed new light onto existing findings and resolve existing tensions. Throughout, I consider "emotion" to be the experience of an evaluative relationship between person and circumstance that is associated with particular actions or outcomes in a given moment (e.g., anger's focus on obstruction and implied

need for argument). "Affect" refers to feelings of valence (pleasantness) and arousal (activation) that may or may not be experienced as an emotion. I therefore concentrate on words that name specific emotions (e.g., "anger" or "angry") or more general affect (e.g., "unpleasant" or "tense") rather than associated contexts or behaviors (e.g., "fight", "scowl")—even though the latter have been referred to as "emotion words" (e.g., in the Linguistic Inquiry and Word Count [LIWC] dictionary; Pennebaker, Boyd, Jordan, & Blackburn, 2015) or "affect labels" (e.g., as in Lieberman, Inagaki, Tabibnia, & Crockett, 2011). In the discussion, I return to this definition of emotion words and reflect on how it might be further nuanced or expanded.

## 2. Processes linking emotion words to emotional functioning and well-being

### 2.1 Symbolizing affective experience

Thinking about emotion words as encapsulating affective experience has a long history in psychological research. Around the beginning of the 20th century, practitioners of psychoanalysis became interested in how people differed in their ability to understand and describe emotions (e.g., Freud, 1891, 1895). In their view, unconscious conflicts (i.e., emotions) that are not expressed and dealt with through words or images are expressed through (troublesome) bodily symptoms (i.e., they are somatized; Haviland, Warren, & Riggs, 2000; Krystal, 1979; Lesser, 1981; Taylor, 1984). That is, emotion words are thought to aid well-being by symbolizing internal processes, making them into emotions, per se, by integrating aspects of physical and mental experience that would otherwise remain diffuse and unresolved. The first observational confirmations of this idea came from patients with psychosomatic disorders (e.g., hypertension, dermatitis, ulcers), who seldom reported experiences of emotion and instead evidenced a concrete, utilitarian thinking style (e.g., Alexander, 1950; MacLean, 1949; Marty & De M′Uzan, 1963). Researchers interpreted this phenomenon as arising from an underdeveloped symbolic ability, an "infantile personality", or "emotionally illiteracy" (Freedman & Sweet, 1954; MacLean, 1949; Ruesch, 1948). In the 1970s, these observations were formalized as a psychological construct with the name "alexithymia"—literally, "a lack of words for feelings" (Nemiah & Sifneos, 1970; Nemiah, Freyberger, & Sifneos, 1976; Sifneos, 1972).

Alexithymia has subsequently been defined as a set of inter-related difficulties: Individuals with alexithymia are unable to identify, describe, and introspect about experiences of emotion (e.g., Aaron, Snodgress, Blain, & Park, 2018; Sifneos, 1973), and may not be able to imagine them (e.g., Bermond et al., 2015; Lesser, 1981). Contemporary accounts of alexithymia see these difficulties as arising from a global impairment in the processing of emotional information rather than unconscious conflicts (e.g., Donges & Suslow, 2017; Lane, Weihs, Herring, Hishaw, & Smith, 2015; Lumley, Neely, & Burger, 2007; Maroti, Lilliengren, & Bileviciute-Ljungar, 2018). The most common means of assessing alexithymia is via questionnaires that ask respondents to report the extent to which they experience particular difficulties (e.g., "It is difficult for me to find the right words for my feelings"; Bagby et al., 1994; for review and discussion, see Hoemann, Nielson, et al., 2021, pp. 11–21 supplemental material). In this review, it can be assumed that alexithymia was measured using one of the main standardized scales (e.g., Bagby et al., 1994; Vorst & Bermond, 2001) unless otherwise specified. Regardless of measure, alexithymia has shown extensive associations with diminished well-being, including psychopathology, substance abuse, chronic pain, and coronary heart disease (for reviews, see Bermond et al., 2015; Grabe, Spitzer, & Freyberger, 2004; Lumley et al., 2007; Taylor, 2000).

Both clinical and experimental work has extended the initial observations that people with alexithymia are less aware of experiences of emotion, or at least less able to articulate them. Multiple studies have shown that alexithymia is related to impaired processing of emotion words. Lane and colleagues (1996) asked a community sample to perform a series of tasks in which they matched verbal and non-verbal emotion stimuli with verbal and non-verbal emotion responses. For example, on a trial with a verbal stimulus and a verbal response, participants would be asked to select which emotion word best labeled a sentence depicting an emotion (that did not include an emotion word). Participants with higher alexithymia demonstrated lower performance on all tasks (see also Aaron et al., 2018). In another study, Suslow and Junghanns (2002) found that participants with higher alexithymia were slower to make lexical decisions to emotion words after they were presented with related versus unrelated emotion situations (see also Yao et al., 2018). To investigate impacts of alexithymia on memory, Luminet and colleagues (2006) asked individuals varying in alexithymia to perform a recall task after encoding emotional and neutral words at a perceptual (judge font size) versus semantic (judge definition)

level of processing. No differences were found between low and high alexithymia participants when the neutral words were considered, and there was no systematic effect of level of processing. However, high alexithymia participants were less likely to report a specific memory of the last time they had encountered the emotion words (i.e., during the encoding task). Taken together, these findings suggest that people with higher alexithymia struggle to integrate and remember words for emotion (Donges & Suslow, 2017).

There is likewise evidence that alexithymia is related to reduced production of emotion words. Taylor and colleagues (1985) found that university students with higher alexithymia used fewer words for emotion to describe evocative pictures than did participants with lower alexithymia (see also Roedema & Simons, 1999). In an older adult sample, Luminet and colleagues (2004) found that the absolute number of emotion words used to describe evocative movie clips was not associated with overall alexithymia scores, but that the relative frequency of emotion words was negatively related to self-reported difficulties in verbalizing emotion. That is, people who found it more challenging to put feelings into words also used a lower proportion of emotion words. Building on these findings, Wotschack and Klann-Delius (2013) found evidence of a less diverse emotion vocabulary in people with higher alexithymia. In semi-structured interviews, participants responded to questions about six emotion concepts (e.g., *joy*, *fear*) and described recent life events. A detailed analysis of the interview transcripts revealed, among other findings, that participants with higher alexithymia provided fewer synonyms when describing the emotion concepts. In their autobiographical narratives, these participants used emotion words less often (i.e., fewer tokens) and a smaller number of distinct emotion words (i.e., fewer types). At the same time, there were no between-group differences in the relative frequency of emotion words used nor in overall emotional expressiveness (i.e., when accounting for more general affective language such as collocations [e.g., "felt alone"] and references to behaviors or symptoms associated with emotion [e.g., "cry"]).

The above-reviewed findings generally support the idea that the ability to symbolize emotions by labeling them with words is linked to lower (or absent) alexithymia, and thereby to better well-being. There are also studies documenting more heterogeneous relationships between alexithymia and emotion labels (e.g., Páez, Velasco, & González, 1999 Study 3; Taylor & Doody, 1982). For example, Lundh and colleagues (2002) found that level of alexithymia did not impact ability to recall autobiographical memories

cued by emotion words. Tull and colleagues (2005) found that participants with higher alexithymia used a smaller proportion of less diverse positive emotion words, but a larger proportion of more diverse negative emotion words. Despite this variability, Lee and colleagues (2022) found a modest but negative meta-analytic correlation between alexithymia and multi-domain language abilities in general, as between alexithymia and the propensity to use emotional language in particular (although note that the included studies were not limited to the processing and production of emotion words). Systematic reviews (e.g., Cameron, Ogrodniczuk, & Hadjipavlou, 2014) additionally show that alexithymia is amenable to psychological intervention, including approaches that target the verbal expression of emotion (e.g., Beresnevaite, 2000). Given that alexithymia predicts psychotherapeutic success across many disorders (Samur et al., 2013), evidence of a consistent albeit complex role of emotion words in alexithymia provides important insight into broader questions about the relationship between emotion, language, and well-being.

## 3. Regulating affective experience

The utility of emotion words is not limited to people with alexithymia. A second, more general way that emotion words are thought to relate to well-being is by regulating ongoing affective experiences. Both conventional wisdom and scientific evidence (including that reviewed above) support the notion that putting feelings into words, also known as "affect labeling" (e.g., Lieberman et al., 2007) or "emotion naming" (Nook et al., 2021), can help minimize or manage negative emotional experiences. Over time, the appropriate use of emotion words means less dysregulated negative affect, a symptom of and contributor to poorer mental and physical health (e.g., Gross & Jazaieri, 2014). Early experimental work on the biological underpinnings of these effects found that affect labeling is associated with reduced activity in the amygdala (e.g., Hariri, Bookheimer, & Mazziotta, 2000)—a brain structure often associated with the experience of emotion, and which is also involved in the detection of uncertainty and bringing in new information from the world (Whalen, 2007). For example, Lieberman and colleagues (2007) found that amygdala activity was lowest when participants selected a specific label (e.g., "scared") for emotionally evocative faces (e.g., posing "fear") as compared to when they labeled these faces based on gender, matched them

based on emotion or gender, or simply observed them. Affect labeling also corresponded, as in other studies, with increased activity in the right ventrolateral prefrontal cortex, a region of the brain associated with symbolic, top-down processing of social and affective information (e.g., Aron, Robbins, & Poldrack, 2004; Nomura et al., 2003). These findings suggest that emotion words may "fill in the gap" by helping the brain make meaning of sensory input—in this case, by categorizing it as an instance of emotion—reducing the need for additional information by cueing conceptual knowledge (e.g., Lindquist, MacCormack, & Shablack, 2015; but see Torre & Lieberman, 2018 for discussion).

Subsequent work has corroborated and expanded upon this idea, showing that this meaning-making or categorization process attenuates feelings and patterns of autonomic activity associated with distress (for a review, see Torre & Lieberman, 2018). In one study by Burklund and colleagues (2014), participants were presented with negative emotionally-evocative scenes (e.g., an image of a snake) and were asked to select a label for their subjective experience from a set of three response options (e.g., "anxious", "disgusted", "other"). Participants reported feeling less unpleasant after a block of labeling trials than they did after a block of trials in which they merely observed images with similar content. In another study by McRae and colleagues (2010), reduced skin conductance response (SCR; suggesting lower physiological arousal) were observed when participants applied labels to evocative images according to how these would be seen in general (as opposed to how they were experienced subjectively). Affect labeling has also been shown to have therapeutic value. Kircanski and colleagues (2012) repeatedly exposed patients with clinically diagnosed arachnophobia to a live tarantula. Patients who engaged in affect labeling during the initial session (saying, e.g., "I feel anxious the disgusting tarantula will jump on me") demonstrated greater decreases in SCR and marginally greater approach toward the spider at a one-week post-test relative to those who engaged in other forms of emotion regulation (e.g., distraction) or mere exposure. Critically, the greatest reductions in SCR and increases in approach were observed in patients who used more words for anxiety and fear during exposure.

If affect labeling helps down-regulate negative experiences, so too might it reduce the intensity of positive ones. Indeed, there is evidence to suggest that is the case. In a study by Constantinou and colleagues (2014), participants were presented with pleasant and unpleasant images and instructed to view these passively, select a label for the content (e.g., "object" vs "animal"), or select a

label for the emotion (e.g., "sad" vs "afraid"). Both forms of labeling were associated with less extreme ratings of post-viewing valence, and this was equally true for pleasant and unpleasant images. A similar pattern has been observed in naturally occurring affect labeling. Fan and colleagues (2019) examined the effects of spontaneous emotion word use (in phrases such as "I feel sad") on the valence of subsequent social media posts (here, tweets). Both positive and negative affect labeling were preceded by increases in affective intensity (i.e., more extremely positive or negative tweet valence), and both were followed by returns to baseline (although this return was more precipitous for negative affect labeling; Lieberman, 2019). There are exceptions to this pattern, however. In a series of four studies, Vlasenko and colleagues (2021) found that selecting labels for emotions in positive images was associated with higher rated positive intensity than selecting labels for image content or passive viewing. This effect was robust to variations in study parameters (e.g., whether labels were applied during or immediately after viewing) and also held for negative emotions, such that labeling content (rather than emotion) was most consistently associated with lower negative intensity (see also Ortner, 2015). Putting feelings into words may also be a means of upregulating positive (and negative) emotions.

There are several potential explanations for these heterogeneous and even conflicting reports of labeling's impact on experienced affect. First, they could be due to differences in how affect labeling is operationalized. Studies vary in specificity: some involve specific emotion words (e.g., "scared" vs "angry"; Lieberman et al., 2007), whereas others use more global terms (e.g., "pleasant", "unpleasant", "neutral"; McRae, Taitano, & Lane, 2010). Studies also vary in the target of evaluation: some have participants label their own subjective emotion (e.g., Burklund, Creswell, Irwin, & Lieberman, 2014), whereas others have them label the emotion normatively associated with the stimulus (e.g., Constantinou et al., 2014). Second, the impact of affect labeling may depend on whether participants freely generate labels or select them from a set of choices provided. Self-generating labels is frequently associated with delayed decreases (e.g., Kircanski, Lieberman, & Craske, 2012) or even temporary increases (e.g., Ortner, 2015) in negative affect, while selecting from available labels more often results in immediate reductions in distress (but see e.g., Vlasenko, Rogers, & Waugh, 2021; for discussion, see Torre & Lieberman, 2018). Third, interpretation is further complicated by study differences in the assessment of experienced affect. Rating valence or intensity at the end of each trial, versus after an entire block, may involve different evaluative or

regulatory processes, shifting whether apparent increases or decreases in affect are observed (Vlasenko et al., 2021). Fourth, the intensity of the event or stimulus being labeled likely also plays a role. For example, Levy-Gigi and Shamay-Tsoory (2022) found that affect labeling reduced self-reported distress when the aversive images presented were of high intensity but increased distress when images were low intensity. Further research is necessary to fully disentangle these parameters.

Affect labeling is frequently described as a form of implicit emotion regulation, in that there need not be an intentional goal of changing experienced affect. One important question, then, is how affect labeling stacks up against other, more explicit forms of emotion regulation. The most common comparison is between affect labeling and reappraisal, or the deliberate reinterpretation of a situation or stimulus to alter its emotional impact (typically down-regulating negative emotion, as in "it's not as bad as it looks"; Gross, 1998). Prior research has shown that reductions in distress after labeling subjective experience are correlated with those observed after reappraisal (Burklund et al., 2014; Lieberman et al., 2011), and that affect labeling and reappraisal are associated with similar patterns of neural activation (for a review, see Torre & Lieberman, 2018). However, the joint efficacy of affect labeling and reappraisal—as implicit and explicit forms of emotion regulation—has not been studied until recently. Nook and colleagues (2021) found that freely generating names for emotions felt while viewing aversive images inhibited reinterpretation of those images: Experienced negative affect was equivalent after naming and passive viewing, lowest following reappraisal, and decreased more strongly when participants only reappraised as opposed to both naming and reappraising. These effects held constant across both between- and within-subjects experimental designs and extended to reappraisal via mindful acceptance as well as reinterpretation. These findings suggest that labeling may serve to crystallize (negative) emotions, making them more difficult to change. It is good to know when to use emotion words; it may also be good to know when not to.

Another important question is how many labels—if any—supports emotion regulation. There is some evidence that using more emotion-related words is associated with better therapeutic outcomes (e.g., Kircanski et al., 2012). There is also evidence suggesting a curvilinear relationship: some usage of affective language is beneficial, while too much (or none) is detrimental (Niles, Byrne Haltom, Lieberman, Hur, & Stanton, 2016). Building on these findings, Vine and colleagues (2019) investigated whether exhaustively versus minimally labeling the emotions elicited by a negative

vignette was more conducive to regulation. Participants instructed to consider their feelings broadly and label them with as few words as possible generated more ideas for how to problem-solve and reappraise the situation (e.g., "plan how to fix my problems", "think about a good time") than those instructed to scrutinize their feelings carefully and label them as thoroughly as possible. Participants who gave more words for emotions also reported having less clarity about their feelings. Telling multiple stories about the same event may hinder subsequent attempts to adjust and resolve conflicts by creating confusion about the best path forward (Barrett, Gross, Christensen, & Benvenuto, 2001; Vine, Bernstein, & Nolen-Hoeksema, 2019). The utility of emotion words might not be a case of "the more, the merrier".

Finally, the precise mechanisms linking affect (or emotion) labeling with emotion regulation—and ultimately well-being—remain open for debate and speculation. As reviewed above, it is still far from clear when the use of specific emotion words may aid regulatory effort, and when it may not. The objective of emotion regulation also matters. In many cases, it is desirable to down-regulate negative emotions and up-regulate positive ones, yet this need not always be the case (Riediger, Schmiedek, Wagner, & Lindenberger, 2009). Because emotions are tools that help accomplish situation-specific and culturally-congruent goals, healthy emotion regulation can include up-regulating negative emotion (e.g., making oneself angry to tackle an onerous task; Weidman & Kross, 2021) as well as down-regulating positive emotion (e.g., managing manic states; Gross & Jazaieri, 2014). Labeling emotions may weaken them, in the moment or over time, by converting the details of lived experience into symbols or mental objects, diminishing immediate relevance and increasing psychological distance (Torre & Lieberman, 2018)—a process of abstraction consistent with the theoretical accounts of alexithymia outlined above. Labeling emotions may also intensify them by encouraging awareness, identification, and engagement (e.g., savoring positive emotions; Quoidbach, Berry, Hansenne, & Mikolajczak, 2010; see also Lindquist, MacCormack, et al., 2015; Vlasenko et al., 2021). That is, it may reduce psychological distance, foregrounding a particular kind of experience that is then less mutable—at least for the time being. The function and utility of emotion labeling may also be context-specific, varying based on the specific goals and emotions involved (Aldao, Sheppes, & Gross, 2015; Aldao, 2013). Given the preponderance of experimental methods in this area, additional research is needed that tests these processes and relationships in the vicissitudes of everyday life (e.g., Fan et al., 2019; for discussion, see English & Eldesouky, 2020).

## 4. Reflecting concepts for emotion

A third way that emotion words are thought to relate to well-being is by representing experiences of emotion that are more nuanced and precise. When experiences of emotion are tailored to the situation at hand, behaviors follow suit, leading to consequences supportive of current goals and relationships and congruent with cultural norms (Barrett 2017b, 2017a; Hoemann, Barrett, & Quigley, 2021; Hoemann, Nielson, et al., 2021). The ability to create such context-specific experiences of emotion, known as "emotional granularity" (Tugade, Fredrickson, & Barrett, 2004; and alternatively as "emotion differentiation"; Barrett et al., 2001), is associated with a wide variety of mental, physical, and relational health outcomes (for reviews and meta-analyses, see O'Toole et al., 2020; Seah & Coifman, 2021; Thompson, Springstein, et al., 2021). People with higher emotional granularity more effectively regulate their emotions (e.g., Kalokerinos, Erbas, Ceulemans, & Kuppens, 2019), engage in healthier coping strategies (e.g., Kashdan, Ferssizidis, Collins, & Muraven, 2010), report fewer symptoms of psychopathology (e.g., Willroth, Flett, & Mauss, 2019), and more accurately infer their partners' feelings (e.g., Erbas, Sels, Ceulemans, & Kuppens, 2016). Emotion words may support these outcomes by helping to structure emotion concepts (i.e., one's accrued knowledge of and prior experience with specific emotions). For example, having different words for "angry" and "sad" is a way of breaking down *bad* into unique sets of feelings, contexts, and consequences—just as having different words for "vexed" and "livid" is a way of breaking down *angry*. People with higher emotional granularity can make these finer-grained distinctions between emotional experiences because they have more differentiated emotion concepts, which may be reflected by their use of emotion words.

Emotional granularity is typically assessed by asking participants to repeatedly report the intensity of their experience on a set of emotion words (e.g., Barrett et al., 2001). These self-reports are often collected using experience sampling and daily diary approaches in which participants are asked to rate a random set of moments throughout their day or reflect on a set of moments at day-end (for reviews, see Hoemann, Nielson, et al., 2021, pp. 18–20 supplemental material; Thompson, Springstein, et al., 2021). The resulting intensity ratings are then used to calculate estimates of emotional granularity as the amount of shared variance among the sampled emotions (e.g., using an intraclass correlation; Tugade et al., 2004), on the logic that lower shared variance (i.e., higher emotional granularity) indexes

a tendency toward more precise experiences. The emotion words used for the ratings typically sample a variety of common pleasant and unpleasant emotions that also vary in their level of arousal. The exact number of words used varies across studies but is necessarily limited to a standardized set selected by the researchers (Thompson, Springstein, et al., 2021). Thus, the measurement of emotional granularity may say something about how individuals interpret their experiences vis-à-vis a set of emotion words (as representatives of emotion concepts) but does not capture spontaneous and unconstrained use of emotion words as labels (Kashdan, Barrett, & McKnight, 2015; for related discussion, see Li, Masitah, & Hills, 2020).

Recent years have seen a growing interest in more direct means of assessing the role of labeling in emotional granularity via open-ended response methods. For example, Ottenstein and Lischetzke (2019) asked participants to provide daily descriptions of negative events and to freely describe their feelings during these events. The emotion words they listed were then coded as either specific (e.g., "angry", "sad") or general (e.g., "bad"), with the proportion of specific words treated as an estimate of emotional granularity (see also Lane & Schwartz, 1992; Sommers, 1981). This specificity index was associated with measures of well-being such as daily life satisfaction and positive mood; however, it was not consistently associated with a traditional, rating-based estimate of emotional granularity nor with other measures of emotional functioning such as self-reported alexithymia or difficulties in emotion regulation (Ottenstein & Lischetzke, 2019; for similar findings, see Thompson, Liu, Sudit, & Boden, 2021). Williams and Uliaszek (2021) built upon this approach by coding descriptions of feelings for specificity as well as nuance, with the latter distinguishing between labels for superordinate (e.g., "bad"), basic- (e.g., "angry"), and subordinate-level categories (e.g., "vexed"). Whereas this nuance score was negatively associated with most of the self-report outcome measures included (e.g., depression symptoms), the specificity index was associated with none. A rating-based estimate of emotional granularity was a significant negative predictor of all outcome measures but was not associated with either coding-derived estimate. Given these findings, the utility of current label-based approaches for measuring emotional granularity is as yet unclear.

Theoretically, however, emotional granularity is not primarily defined as the use of specific and nuanced emotion words. On a constructionist account (Barrett, 2006, 2017b, 2017a), the experience of emotion occurs when the brain uses concepts for emotion to make meaning of current

affect in relation to the ongoing situation. When the concepts for emotion are more granular, the resulting experiences of emotion are more context-specific (and, therefore, adaptive; O'Toole et al., 2020). On other accounts (e.g., Erbas, Ceulemans, Lee Pe, Koval, & Kuppens, 2014; Erbas et al. 2018; Erbas, Kalokerinos, Kuppens, van Halem, & Ceulemans, 2021; Shiota et al., 2014; Thompson, Springstein, et al., 2021), differentiated emotional experiences are adaptive because they provide more specific information about the current situation (e.g., via more distinct patterns of appraisals), enabling the selection of more appropriate reactions and emotion regulation strategies (Kalokerinos et al., 2019). In either case, it is emotion concepts or knowledge structures that drive differences in emotional granularity, informing feelings, associations, expectations, and behavior. Emotion words are pointers to these concepts but do not necessarily have a one-to-one relationship with them (Barrett, 2004; Hegefeld, Satpute, Ochsner, Davidow, & Nook, 2023; Shiota & Keltner, 2005). One may know the difference between "vexed" and "livid" on paper but use them interchangeably as labels for experiences of *angry*. One may also use a single word to label different aspects of emotional experience (e.g., "I am angry at them for lying to me; I am angry at myself for believing it"). Concepts for emotion contain more than just emotion words, and words may be used more or less granularly.

Labels may also do more than index emotional granularity; they may play an active role in its development. Work with infants and young children suggests that emotion words serve as a conceptual glue, helping cohere disparate situated instances of feeling and behavior into the abstract, adult-like categories for emotion that emerge over time (Hoemann et al., 2019; Lindquist, MacCormack, et al., 2015). For example, Ogren and Sandhofer (2022) found that 3-year-olds' performance on a category learning task was facilitated by the presence of emotion words. Children who heard a specific emotion label (e.g., "She feels *disgusted*") as opposed to irrelevant information (Study 1; e.g., "She *sits down*") or a broad emotion label (Study 2; e.g., "She feels *bad*") were better able to match photos of expressive faces to their corresponding evocative scenarios (see also Ruba, Meltzoff, & Repacholi, 2020). Vedernikova and colleagues (2021) showed that receiving information about emotion words even helps adults to differentiate more between their experiences. Hoemann and colleagues (2021) likewise found that emotional granularity improves with repeated reflection on daily experiences, and that these improvements may be moderated by various forms of engagement with emotion words. Its

diverse associations with well-being make emotional granularity a compelling target for intervention. Additional research is needed to show exactly what form this intervention should take, as well as the particular function served by emotion words as labels for experiences.

## 5. Reflecting attention to emotion

A fourth and, for this chapter, final way that emotion words are thought to relate to well-being is by reflecting current and habitual patterns of attention. To use a word for emotion—whether in reference to yourself or to another person, literally or figuratively, in the past, present, or future—is to attend to that dimension of experience (e.g., "angry" foregrounds "angry-ness" just as "green" foregrounds "green-ness"). The repertoire of emotion words an individual uses, then, says something about the dimensions of experience that are typically in focus (Vine et al., 2020). One person's repertoire might encompass many different words, suggesting they have need of these labels because they commonly experience or perceive all these emotions. Another person's repertoire may be limited to a few words, suggesting only these types of experiences are frequent or familiar. Words are tools for categorizing and communicating, and people tend to be economical in their tool use (Zipf, 1949). In this way, the words that people actively use—rather than those they simply passively recognize—provide insight into the mental and social operations most often performed (for discussion, see Boyd & Pennebaker, 2017). This "words as attention" understanding of language use (Boyd & Schwartz, 2021) carries its own set of hypotheses about emotion labels and well-being. Namely, it predicts differential impacts for well-being based on word valence—that is, whether the words being used index emotions that are pleasant (positive) versus unpleasant (negative).

In a test of this hypothesis, Vine and colleagues (2020) estimated the diversity of emotion words that were spontaneously used by individuals engaged in expressive writing. These "active emotion vocabularies" were calculated by counting the number of unique emotion concepts invoked (e.g., using "happy" or "happiness" for *happy*) as a function of text length. Across both stream-of-consciousness essays and blog posts, larger negative emotion vocabularies were generally correlated with greater psychological distress and poorer physical health, and larger positive emotion vocabularies with better well-being and physical health—even when controlling for the

overall valence of texts. Outcome measures were supplied by self-report instruments (e.g., depression symptom inventories) and inferred from language features commonly associated with health and well-being (e.g., illness words, first-person singular "I" versus plural "we" pronouns; Tausczik & Pennebaker, 2010). Extending these findings to a clinical context, Entwistle and colleagues (2023) found that people with (more characteristics of) borderline personality disorder used larger negative emotion vocabularies. This association was insensitive to the context of language use (e.g., writing about interpersonal relationships versus everyday behaviors) but was not consistently robust to text valence (see also Meier, Stephens, & Haase, 2023; Thompson, Liu, et al., 2021). These studies provide initial evidence that spontaneously produced labels for emotion reflect attention and experience, such that using a greater variety of negative emotion words may be indicative of poorer well-being. Whether this is because these labels are being deployed to achieve momentary goals (e.g., to express negative affect) or because they are a product of personal history (e.g., of depression) remains to be seen.

Regardless, the broader idea—that emotion words represent patterns of attention consistent with either good or ill health depending on the valence of the language used—has received broader support in the literature. For example, Li and colleagues (2020) asked people to produce 10 words to describe their recent emotions and found that the average valence of these words was associated with self-reported life satisfaction and mental health. Valence estimates derived from overall language use (not limited to specific emotion labels) are similarly associated with measures of well-being (for a summary, see Sun, Kern, Schwartz, Son, & Vazire, 2019, Table 1). However, it is an open question as to whether language-derived valence estimates necessarily track subjective experience from moment to moment. This appears to hold true when the language is elicited as a direct and intentional report (as in Li et al., 2020; see also Carlier et al., 2021), but not when valence estimates are based on ambient speech (Sun et al., 2019) or social media posts (Kross et al., 2019; but see Eichstaedt & Weidman, 2020). Further, it is not necessarily the case that any use of negatively-valenced language is bad. Studies of expressive writing suggest that negative emotional expression is non-linearly related to improved well-being, with a moderate amount providing the most benefit (for review, see Pennebaker, Mehl, & Niederhoffer, 2003). Stated otherwise, putting feelings into words may be helpful so long as attention does not become fixated or "stuck" on the unpleasant. As outlined below,

**Table 1** Potential relationships between emotion words and momentary versus overall emotional functioning and well-being.

| Emotion word usage | Outcome/association | Candidate mechanism (s) | Relevant literature (s) | Example reference |
|---|---|---|---|---|
| *Momentary relationships* | | | | |
| Applying at least one emotion word | Attenuated current affect | Abstraction, symbolization | Alexithymia, affect labeling | Torre and Lieberman (2018) |
| Applying at least one emotion word | Intensified current affect | Awareness, engagement | Affect labeling | Vlasenko et al. (2021) |
| Applying at least one emotion word | Crystallized current affect | Emotion generation | Affect labeling | Nook et al. (2021) |
| Using more negative/positive emotion words* | Higher current negative/positive affect | Greater current attention to negative/positive emotion | Active emotion vocabularies | Li et al. (2020) |
| Using multiple emotion words in a non-specific way | Lower emotional clarity | Undifferentiated concepts for emotion | Affect labeling, emotional granularity | Vine et al. (2019) |
| Using multiple, context-specific emotion words | Better coping | Differentiated concepts for emotion | Emotional granularity | Faraji-Rad et al. (2024) |
| *Overall relationships* | | | | |
| Endorsing emotion words in a context-specific way | More effective emotion regulation | Differentiated concepts for emotion | Emotional granularity | Barrett et al. (2001) |

| | | | | |
|---|---|---|---|---|
| Using emotion words that are more specific/nuanced | Better well-being | Differentiated concepts for emotion | Emotional granularity | Ottenstein and Lischetzke (2019) |
| Learning more about emotion words | Higher emotional granularity | Differentiated concepts for emotion | Emotional granularity | Vedernikova, Kuppens, and Erbas (2021) |
| Using a greater diversity of emotion words | Lower alexithymia | Healthy processing of emotional information | Alexithymia, active emotion vocabularies | Luminet et al. (2004) |
| Using a greater diversity of negative emotion words | Poorer well-being | Greater habitual attention to negative emotion | Active emotion vocabularies | Vine et al. (2020) |
| Using a greater diversity of positive emotion words | Better well-being | Greater habitual attention to positive emotion | Active emotion vocabularies | Vine et al. (2020) |

Note: *"More" negative/positive emotion words can mean more intensely negative or positive words (as in Li et al., 2020) or a higher proportion of negative or positive words (as in Carlier et al., 2021).

future research can work to disentangle how emotion words' contexts of use inform their relationship with momentary attention and experience as with habitual patterns therein.

## 6. Comparing the proposed roles for emotion labeling

Table 1 summarizes the potential relationships, reviewed above, between emotion words and momentary versus overall emotional functioning and well-being.

## 7. Emotion generation versus regulation

Looking across the four proposed roles for emotion labeling in emotional functioning and well-being (symbolizing and regulating affective experience, reflecting concepts for and attention to emotion), two fundamental observations emerge. The first is that there are similarities and differences in the assumptions made about the experience of emotion. Namely, some of the studies reviewed above see emotion labeling as a means of generating an instance of emotion, and some see it as a means of regulating an instance of emotion that already exists. These two perspectives on the "status" of emotion before it is named echo existing theoretical debates about the nature of emotion (e.g., Gross & Barrett, 2011) and the causal influence of language (e.g., Shiota & Keltner, 2005). Pertinent to the present chapter, these perspectives make different predictions about when and how emotion words impact the lifecycle of emotional experience, with knock-on effects for emotional functioning and well-being.

An "emotion generation" perspective on labeling holds that emotion words help constitute the experience of emotion. That is, an experience would not be an experience of emotion, per se, if it were not for an emotion word. There are two ways this can play out, varying on how directly emotion words are invoked. In the most direct, an emotion word is applied (implicitly or explicitly) to a current or previous experience, transforming it into an experience of emotion. This, broadly, is the idea behind emotion words as symbols that integrate the diverse elements of affective experience into a functional, abstract interpretation of one's relation to the social world. This thinking gave rise to the construct of alexithymia (e.g., Ruesch, 1948) and is tested in studies where alexithymic traits are compared to the ability to process and produce emotion

words (e.g., Lane et al., 1996; Luminet et al., 2004). A second way that emotion words inform the generation of emotional experience is through their relationship with emotion concepts. Here, the idea is that emotion words are key features of emotion concepts that scaffold how they are learned, organized, and employed (e.g., Hoemann et al., 2019; Lindquist, MacCormack, et al., 2015). Because emotion concepts—as stores of accrued knowledge and prior experience—are used to create instances of emotion, words are also necessarily albeit indirectly involved (and altering this involvement has impacts for emotional functioning; Lindquist, Satpute, & Gendron, 2015). This way of understanding emotion words is in keeping with constructionist approaches to emotional granularity (e.g., Barrett, 2004, 2017a) and is evidenced by studies that ask participants to evaluate their experiences in relation to a set of emotion words (rather than to label them; e.g., Tugade et al., 2004).

An "emotion regulation" perspective on labeling, by contrast, holds that emotion words help manage the intensity or outcome of ongoing affective experience. Emotion words are not involved in creating new instances of emotion but in bringing feelings in line with goals. This perspective is most clearly endorsed in the literature on affect labeling, where it takes several forms. Most studies contend that the target of affect labeling is, perhaps obviously, affect—not emotion. In these studies, labels are thought to regulate unconscious or undifferentiated affect by converting it into a mental object, and so are seen analogously as in the literature on alexithymia (Torre & Lieberman, 2018). There are also a few studies where it is implied that labeling operates on fully-formed experiences of emotion (e.g., Kircanski et al., 2012), and studies where labeling is shown to be at odds with regulatory effort (potentially because of its fundamental role in emotion generation; e.g., Nook et al., 2021). Further, according to appraisal-based accounts of emotional granularity, labeling is not itself a form of emotion regulation, but a prerequisite for it—knowing exactly what you feel is the first step in knowing what to do about it (e.g., Kalokerinos et al., 2019; see also Barrett et al., 2001). A comprehensive synthesis of the role of labeling in emotional functioning and well-being requires awareness of these theoretical differences.

## 8. Expertise in emotion

There are also similarities and differences in the assumptions these processes and their associated constructs make about emotion-related skills.

Alexithymia and emotional granularity have both been described as forms of expertise in emotion, as they capture (in)abilities in the mental representation of emotional experience that can be learned or improved over time (Hoemann, Nielson, et al., 2021). Experts have expansive and complex knowledge about their domain of study, categorizing and verbally representing it using concepts and words that are varied and precise. For painters or interior designers, the domain might be color—knowing the difference between *aqua*, *teal*, and *turquoise* rather than simply *green* versus *blue*—and this knowledge would be accompanied by a larger vocabulary for colors. In the domain of emotion, expertise means having experiences of emotion that are diverse and nuanced (as in people with higher emotional granularity) and which are easily identified and described (as in people with low or no alexithymia). The implication is that alexithymia and emotional granularity should also be associated with the number and diversity of emotion words one knows and/or uses, such that using more (different) words is linked with better outcomes. The evidence at present is mixed. While there are studies documenting theoretically-consistent correlations between alexithymia and emotion vocabulary diversity (Wotschack & Klann-Delius, 2013) as between emotion vocabulary size and emotional granularity (Ikeda, 2023), other studies have found emotion fluency to be unrelated to alexithymia and other measures of emotional functioning and well-being (e.g., self-reported mental health and task-based emotion regulation ability; Hegefeld et al., 2023; but see Abeare, Freund, Kaploun, McAuley, & Dumitrescu, 2017; Camodeca, Walcott, Hosack, & Todd, 2021).

A "words as attention" understanding of language use offers a different set of predictions and findings regarding the relationship between emotion vocabulary and well-being. As reviewed above, Vine and colleagues (2020) showed that using a more diverse set of words for negative emotion (i.e., having a larger negative active emotion vocabulary) was associated with poorer mental and physical outcomes, whereas the opposite was true for positive emotion words. Coincidentally, the authors also interpret these effects in terms of expertise. Just like the distinction between "teal" and "turquoise" stands out to a painter because they spend a lot of time around colors, so does a more diverse set of words for emotion suggest one spends more time engaging with feelings. This is a good thing when these experiences are positive, but not when they are negative—using a richer set of words for sadness, for instance, may come from being more often sad. At the same time, the idea that expertise is equivalent to preoccupation or

interest does not square with the broader literature (e.g., Bédard & Chi, 1992; Steels, 1990; Sternberg, 1998; Ullén, Hambrick, & Mosing, 2016). Expertise does involve attention to the domain in question, but also requires context-specific and flexible application of domain knowledge (Hoemann, Nielson, et al., 2021). There is evidence that this context-specificity is lacking in people with larger negative emotion vocabularies (Entwistle et al., 2023), raising the possibility that they are not true experts—or, at least, that their expertise is incomplete. A full test of the relationship between emotion words and expertise in emotion will depend not on sheer numbers, but on situation-dependent estimates of word meaning in use. I discuss this idea further in the following section on considerations for future research.

## 9. Considerations for future research

### 9.1 Defining emotion words

Foundational to all research on the role of emotion words is defining what, in the first place, an emotion word is. For the purposes of this chapter, I have concentrated on words that name specific emotions (e.g., "anger", "angry") or more general affect (e.g., "unpleasant", "tense") rather than associated contexts or behaviors (e.g., "fight", "scowl"). This definition of emotion words, operational in its intent, is deceptively difficult to implement. Despite decades of reasoning and empirical work on identifying emotion words (e.g., Clore, Ortony, & Foss, 1987; Johnson-Laird & Oatley, 1989; Ortony, Clore, & Foss, 1987), consensus has yet to be achieved. For example, must words refer exclusively to emotion as a property of the self (e.g., "I am annoyed"), or can they also refer to emotion as a property of the world (e.g., "this is annoying")? Despite their difference in focus (Lambie & Marcel, 2002), both types of words pick out a specific evaluative relationship between a person and their circumstance. As another example, Ortony and colleagues (1987) proposed that (in English and other similarly structured languages) true emotion words are those that describe an emotion when used in terms of "being" (e.g., after the verb "am") rather than in terms of "feeling" (i.e., after the verb "feel"). By this definition, "lonely" would be an emotion word, but "alone" would not (because "I am alone" does not entail affective experience). At the same time, if participants are asked to label or list emotion words (e.g., by responding to the prompt "How do you feel?"), should "alone" not be

counted? Wotschack and Klann-Delius (2013) addressed this and other considerations by differentiating between six types of affective language, ranging from explicit, discrete emotion words to implicit, figurative expressions (e.g., metaphors). One interim category captured phrases such as "I feel alone", while another captured behavior such as "crying". This comprehensive coding approach made it possible to robustly characterize the verbal representation of emotion but may not be necessary for studies seeking to examine the effects of emotion labels, per se.

Even for those looking to make a single list, however, determining what is, and is not, an emotion word is not so simple. Looking only at studies in English (which represent much of the work to date), there is remarkable range in the number and type of words considered. For example, to score emotional granularity in text, Williams and Uliaszek (2021) supplemented the 590-word lexicon created by Johnson-Laird and Oatley (1989) based only on participants' self-descriptions. To quantify active emotion vocabularies, Vine and colleagues (2020) identified 274 word stems from among those used by LIWC to assess positive and negative affect, including "true" labels like "lonely" and "feeling" labels like "alone", world-focused labels like "annoying", and more general descriptors such as "bad" (although these were considered separately as "undifferentiated affect"). To code responses in an emotion fluency task, Validivia-Moreno and colleagues (2024) identified 345 words that additionally included collocations (e.g., "pumped up"), epistemological stances (e.g., "denial"), social orientations (e.g., "flirtatious"), normative evaluations (e.g., "crazy"), and body states (e.g., "hyper"). This "common sense", inclusive approach to defining emotions allows researchers to remain flexible to the patterns of word use in their data (e.g., capturing current slang, e.g., "cringe"), but may not be comprehensive nor valid in all settings. It may be more reasonable to count labels like "alone" as emotion words in cases where participants have been asked explicitly to label, list, or describe their emotions, than in cases where people are unaware their language is being analyzed for this purpose (e.g., social media posts). Word counting in these latter cases may result in the appearance of emotion where none was intended (e.g., "we were alone", "a crazy idea", "he is a bad man"). I unpack these considerations further in the following sections.

## 9.2 Accounting for context

The role of emotion labeling in emotional functioning and well-being has been assessed in many ways (Table 2). In structured tasks, participants have

**Table 2** Effects of emotion labels across methodological contexts.

| Stimulus/event | Label source | Label referent | Label type | Label number | Label application | Label effect | Example reference |
|---|---|---|---|---|---|---|---|
| *Structured tasks* | | | | | | | |
| Aversive images | Provided | Subjective | Emotion | Single | Immediate | Decreases in negative affect | Burklund and colleagues (2014) |
| Evocative images | Provided | Normative | Affect | Single | Immediate | Decreases in physiological arousal | McRae et al. (2010) |
| Evocative images | Provided | Normative | Emotion | Single | Immediate | Decreases in positive as well as negative affect | Constantinou et al. (2014) |
| Evocative images | Provided | Normative | Emotion | Single | Immediate | Increases in positive as well as negative affect | Vlasenko et al. (2021) |
| Aversive images | Generated | Subjective | Emotion | Single | Immediate | Increases in negative affect | Ortner (2015) |
| Aversive images | Generated | Subjective | Emotion | Single | Immediate | No decrease in negative affect; inhibited emotion regulation | Nook et al. (2021) |
| Negative vignette | Generated | Subjective | Emotion | Multiple | Immediate | Inhibited emotion regulation, clarity | Vine et al. (2019) |
| Fear exposure | Generated | Subjective | Emotion | Multiple | Immediate | Greater decreases in physiological arousal, greater approach to stimulus, one week later | Kircanski et al. (2012) |

(*continued*)

**Table 2** Effects of emotion labels across methodological contexts. (*cont'd*)

| Stimulus/event | Label source | Label referent | Label type | Label number | Label application | Label effect | Example reference |
|---|---|---|---|---|---|---|---|
| Negative film | Generated | Normative | Emotion | Multiple | Retrospective | Proportion of emotion words negatively related to alexithymia facet | Luminet et al. (2004) |
| *Semi-structured methods* | | | | | | | |
| Daily events | Provided | Subjective | Emotion | Multipl-eR | Immediate | Differentiated emotion ratings positively related to emotion regulation | Barrett et al. (2001) |
| Daily events | Generated | Subjective | Both | Multiple | Retrospective | Proportion of specific words positively related to well-being | Ottenstein and Lischetzke (2019) |
| Recent life events | Generated | Subjective | Emotion | Multiple | Retrospective | Diversity of emotion words negatively related to alexithymia | Wotschack and Klann-Delius (2013) |
| Negative events | Generated | Subjective | Both | Multiple | Retrospective | Use of more nuanced words positively related to well-being | Williams and Uliaszek (2021) |
| Dyadic interaction | Generated | Any | Emotion | Multiple | Unknown | Diversity of negative emotion words positively related to mental health disorder | Entwistle et al. (2023) |

*Unobtrusive methods*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Social media | Generated | Subjective | Emotion | Single | Immediate | Decreases in positive as well as negative affect | Fan et al. (2019) |
| Personal essays | Generated | Any | Emotion | Multiple | Unknown | Diversity of negative emotion words positively related to distress, ill health | Vine et al. (2020) |
| *Other* | | | | | | | |
| Fluency task | Generated | N/A | Both | Multiple | N/A | Number of emotion words unrelated to emotion regulation, mental health | Hegefeld et al. (2023) |

*Note:* List of studies representing key methodological differences in the assessment of emotion labeling. Study designs and label effects can also vary on parameters not specified here (e.g., intensity of stimulus [Levy-Gigi & Shamay-Tsoory, 2022]; whether affect is reported per trial or per block [Vlasenko et al., 2021]). Label Source = Provided (by experimenters) vs Generated (by participants); Label Referent = Subjective (participants' own emotions) vs Normative (emotion represented in/by stimulus) vs Any (could also include others' emotions); Label Type = Emotion (e.g., "angry") vs Affect (e.g., "unpleasant") vs Both; Label Number = Single (limited to one per stimulus/event) vs Multiple (more than one could be applied) vs Multiple$^{R}$ (all provided labels rated by participants); Label Application = Immediate (during or immediately after stimulus/event) vs Retrospective (during recollection of stimulus/event) vs Unknown (label could apply to current or past experiences).

been presented with evocative stimuli such as aversive images and asked to describe them (e.g., Luminet et al., 2004), select the emotion represented by the stimulus (e.g., Constantinou et al., 2014) or elicited in themselves (e.g., Burklund et al., 2014), or freely label their own emotional responses (e.g., Nook et al., 2021). Using semi-structured methods, participants have been interviewed about recent life events and their emotion knowledge (Wotschack & Klann-Delius, 2013), asked to rate (e.g., Barrett et al., 2001) or freely describe their feelings during daily events (e.g., Ottenstein & Lischetzke, 2019), or recorded while engaging in emotional conversations (e.g., Entwistle et al., 2023, Study 2). Spontaneous emotion word use has also been assessed unobtrusively through stream-of-consciousness essays and blog posts (Vine et al., 2020) or social media posts (e.g., Fan et al., 2019). Finally, participants have been asked to generate as many emotion words as they can (e.g., Hegefeld et al., 2023). Several cross-cutting distinctions can be made between these approaches. As discussed previously, methods differ on whether they ask participant to select or generate labels, and whether these labels apply to subjective experience versus more general forms of emotion knowledge (e.g., the emotion conventionally represented by an image). In tests of emotion fluency, participants are even asked to produce emotion words in the absence of a particular stimulus or event. Other distinctions are possible, as well. As mentioned above, some methods explicitly prompt for emotion words, whereas others analyze natural language. Sometimes multiple labels are possible or encouraged, sometimes only one is allowed.

Each of these methods creates a unique context for emotion word use, and each context may invoke a different underlying process or set of processes. For instance, when applied in the moment, emotion labels may serve to attenuate or intensify experienced affect (e.g., Burklund et al., 2014; Vlasenko et al., 2021), but when applied in retrospect may help to build out the emotion concepts that are used to construct experience (e.g., Hoemann et al., 2019). Similarly, explicitly asking participants to react to evocative content is a way of assessing their ability to symbolize emotions (e.g., Luminet et al., 2004), whereas unobtrusively analyzing their natural language is a way of assessing their tendency to attend to emotion (e.g., Vine et al., 2020). Previous research has noted that the processes linking emotion words to emotional functioning and well-being may vary according to the exact task used for assessment (e.g., Torre & Lieberman, 2018). As a case in point, measures of emotion word fluency may not be related to measures of emotion regulation and mental health because this

task does not assess how emotion words are used to make meaning of experienced affect or personally relevant events (for discussion, see Hegefeld et al., 2023). Yet there is also a deeper implication here. If different methodological contexts are associated with different processes—if two processes cannot be examined with the same context, or the same process across multiple contexts—then it may not be possible or even relevant to determine which process is most crucial overall. The utility of emotion words is not all-encompassing, but depends on when, where, how, and why they are being used.

It follows, then, that the best outcomes will be observed among people who can deploy emotion labeling in a situation-dependent manner. The idea that flexible adaptation is key to well-being is consistent with theoretical frameworks for emotion regulation and emotional granularity (e.g., Aldao, 2013; Kashdan et al., 2015), as it is with an account of emotion-related skills as a form of expertise (Hoemann, Nielson, et al., 2021). From these standpoints, simply counting the number of (unique) emotion words a person produces—in a moment, or in general—cannot provide sufficient insight into what these words are being used to do (Hegefeld et al., 2023; see also Boyd & Schwartz, 2021). Labeling an experience with multiple words (e.g., "sad, angry, and worried") could represent a healthy albeit complex interpretation if each word captures a separate perspective taken on the event (Katz, 1980). Maybe you are sad that you lost an opportunity, angry that someone undeserving got it instead, and worried about what this means for your chances in the future. Each perspective tells a specific, actionable story. By contrast, listing words without pinpointing the "why" of each one could indicate emotional uncertainty or ambiguity, lumping experience into a big negative mess without a clear path forward. These sorts of contextualized differences in emotion word use can be captured using manual annotation schemes (e.g., Labouvie-Vief & Medler, 2002; Lane & Schwartz, 1992), although these are challenging to roll out at scale. Recent innovations in natural language processing methods can be used to address this gap by accounting for the linguistic contexts in which emotion words occur (e.g., distinguishing between "I felt alone" and "we were alone"), and comparing these contexts to estimate how precisely emotion words are being used (Faraji-Rad, Tamaddoni, & Jebeli, 2024).

## 9.3. Embedding labeling in everyday life

Emotion words are not only used alongside other words and in the context of a particular method of data collection. In everyday life, emotion words

are used to accomplish things in the context of social relationships and personal goals. Describing emotional experiences rarely, if ever, involves a label by itself-you would likely not respond to unfair treatment at work simply with "frustrated", or to an argument with a dear friend with "hurt". In addition to delivering these words in sentences (e.g., "I am frustrated"), you would be communicating these events to others in conversation, or maybe to yourself in a diary or journal. These activities make their own contribution to emotional functioning and well-being, aside from any emotion labels they may involve. Social sharing, or disclosing one's emotions to others, fosters interpersonal connection by providing an opportunity for comfort, support, advice, and validation (Rimé, 2009). Likewise, expressive writing is beneficial for emotion regulation and health because it prompts meaning-making about the possible causes and consequences of emotional events (Pennebaker & Chung, 2011). Emotion words may tell a story in theory, but in practice they do not work alone, and their unique effects may be difficult to isolate.

Social constructionist accounts of emotion see emotion labels as a means of jointly negotiating goals and values with others. For example, telling your coworker that you are frustrated with the way they treat you is a way of asserting your needs and gives them the opportunity to share their perspective. In this way, the meaning of emotion words lies not in what they canonically reflect but how they are used in the service of social coordination (e.g., Boiger, Deyne, & Mesquita, 2013; Mesquita & Boiger, 2014; see also Geeraerts, 2016). This view entails that emotion labeling—and, by extension, emotional functioning—is best studied in the context of social interaction (see also von Rad & Lolas, 2010), and carries several implications for future research. First, it stresses the need to consider the pragmatics of emotion word use (Edwards, 1999; Parkinson, 1996). The number and type of emotion labels varies by intended audience and purpose (e.g., by register or genre; Bednarek, 2008), such that findings from studies of social media posts and conversation transcripts are neither directly comparable nor generalizable (see also Balon & Rimé, 2016). Second, a social constructionist view places constraints on the number of unique emotion words that might profitably be used. If labels' function is in the service of social coordination, then effective emotional functioning requires the ability to use at least a basic set of emotion labels (consistent with research on alexithymia). It also requires using words that are mutually shared. "Livid" provides no benefit over "angry" if it is not meaningful to your audience. In this way, social interaction imposes an upper as well as a

lower bound on a "healthy" active emotion vocabulary. These bounds will, of course, also vary by relationship (e.g., acquaintance vs romantic partner) and activity (e.g., therapy vs work) as they will by the cultural context in which these interactions take place.

The number and type of words that are relevant to emotional functioning and well-being differs by culture, because cultures differ in how they organize social relationships and personal goals. The vast majority of research on emotion labeling has been conducted in European and European-American settings and mostly in English (with a few studies in French, German, or Dutch). These cultures and languages do not represent the full spectrum of human psychological experience and functioning (e.g., Blasi, Henrich, Adamou, Kemmerer, & Majid, 2022; Henrich, Heine, & Norenzayan, 2010). More research that investigates alexithymia, affect labeling, emotional granularity, and active emotion vocabularies in a broader set of contexts is clearly necessary. Beyond tailoring measures and stimuli to each culture and language, such research will need to consider potential cultural variation in underlying conceptual models for emotion (Lillard, 1998; Russell, 1991). A European and European-American model understands emotions principally as internal mental states and prioritizes individuals' subjective feelings or appraisals (Hoemann et al., 2023). In many East Asian and African cultures, by contrast, emotional events are more typically understood as bodily or action states (e.g., Dzokoto, Senft, Kpobi, & Washington-Nortey, 2016; Zhou, Critchley, Garfinkel, & Gao, 2021) and described using somatic and social language (e.g., Tsai, Simeonova, & Watanabe, 2004; for discussion, see Ip, Yu, & Gendron, 2023). In such contexts, words that refer to the body and relationships may also serve regulatory functions, telling culturally relevant stories about what is happening and what to do about it (Mesquita, 2022; Uchida, Nakayama, & Bowen, 2022). Rather than pathological (e.g., indicating alexithymia), describing affective experience in bodily and interpersonal terms may be linked to positive mental, physical, and relational outcomes (e.g., Choi, Chentsova-Dutton, & Parrott, 2016; Ryder et al., 2008). A key task for future research on the role of emotion labeling, then, is to establish methods for defining words for "emotion" in a way that is culturally sensitive.

## 10. Conclusion

This chapter reviewed the multiple roles that labeling one's emotions is hypothesized and observed to play in emotional functioning and

well-being. The picture that these processes and findings paint is not immediately clear. There are many ways and circumstances in which emotion words appear to help people feel better, behave adaptively, and lead healthy lives. There are also times when emotion words do not appear to have these salutary effects (or might even have the opposite), and times when emotion words are unlikely to be acting alone. Future research can seek to reconcile these mixed findings by more fully accounting for the contexts in which emotion words are used, and by creating an integrated framework that addresses when and how emotion words support functional outcomes.

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