Cultural models of emotion manifest in descriptions of everyday experience: A case study of the US and Belgium

Katie Hoemann[1,2]*, Rüya Su Şencan[1]*, Anouck Cochez[1], Catho Beckers[1], & Batja Mesquita[1]

1. Faculty of Psychology and Educational Sciences, KU Leuven, Leuven, Belgium
2. Department of Psychology, University of Kansas, Lawrence, KS, USA

* Indicates shared first-authorship.

Corresponding author:

Katie Hoemann
Department of Psychology
1415 Jayhawk Blvd, Lawrence, KS, USA
+1 785 864 2717
hoemann@ku.edu

Abstract

Language provides a window onto how people conceptualize their subjective experiences, including emotions. Although rare, linguistic analyses that go beyond emotion words provide deep insights into emotional experience across cultures. In this study, we explored cultural models of emotions prevalent in the US and Belgium using verbal descriptions of recent emotional events collected in 2020-2022 from speakers of North American (US) English and Belgian Dutch in the form of semi-structured interviews. We analyzed the interviews in three stages: 1) topic modeling to characterize content, 2) word counting to examine linguistic resources, and 3) inductive analysis to uncover broader themes. Our findings revealed notable cultural differences alongside some similarities. US English speakers used more first-person pronouns and emotion words, emphasized high-arousal emotions, and prioritized asserting personal achievements and openly expressing their feelings. In contrast, Belgian Dutch speakers' descriptions reflected a more moderated approach to emotions, illustrating how social standards and broader worldviews gave meaning to the events, with use of fewer first-person pronouns and more language focused on relativization and comparison. These differences are unlikely to be fully explained by differences in language structure or the analytical tools used. Our observations are consistent with previous psychological research on US and Belgian culture. At the same time, our samples came only from California and Flanders, respectively, and had no recent history of immigration, potentially limiting the generalizability of our findings. We evaluate our approach against other means of exploring the conceptualization of emotion across cultures.

Keywords: concepts, discourse analysis, cross-linguistic, natural language, computational linguistics

Language provides a window onto how people understand the social and physical world around them and their place in it. For this reason, it is often used in cross-cultural studies of subjective experience, including emotion. In many cases, the analysis of "emotion language" focuses on the words that are used to label and thus categorize different types of experiences, and in doing so sheds light onto the structure of emotion concepts across languages (Jackson et al., 2019). While emotion words are convenient shortcuts to emotional meaning, language is more than just a collection of labels. It offers a rich source of information about how people represent their experience, in a dynamic and complex fashion, situated in context (Boyd & Schwartz, 2021; Hoemann, Gendron, et al., 2023; Jackson et al., 2021). It captures the nature of the events being described, the aspects of these events that are emphasized, and the goals, beliefs, and norms that shape emotional experiences. To gain access to various dimensions of emotional meaning, linguistic analyses must therefore extend beyond emotion words. In the present study, we explore cross-cultural differences in the conceptualization of emotion using verbal descriptions of experience from speakers of North American (US) English and Belgian Dutch. Our examination combines topic modeling to explore the types of events people discuss, word counting approach to zoom into features that are being emphasized, and an inductive analysis of common perspectives in these descriptions. Using a multi-method approach encompassing both qualitative and quantitative analyses, we reveal how each group highlights different types of events, features, and perspectives. We interpret our findings, within and across analyses, in relation to models of emotion known to be dominant in each cultural context (Boiger et al., 2013).

Looking Beyond Emotion Words to Understand Experience Across Cultures

When researchers study emotions and language, they often look at specific words that represent emotions, like "happy" and "sad". For instance, Jackson and colleagues (2019) examined patterns of colexification in 2474 world languages – did a given language use the same word (lexeme) for the concepts *happy*, *proud*, *merry*, etc.? The authors found both commonalities and differences in the way languages around the globe clustered concepts for emotion. All language families differentiated emotions based on pleasantness (i.e., valence) and activation (i.e., arousal), but *happy* was more related to *proud* or *merry* in some languages than in others, among other differences. Studies have similarly examined how words for emotion translate across languages. English "shame" is often translated in Spanish as "vergüenza," even though the underlying concepts differ in both their content and structure (Hurtado de Mendoza et al., 2010). *Shame* is associated with internal attributions of blame for moral transgressions, whereas *vergüenza* recalls evaluations by social others and corresponding feelings of discomfort. Spanish also has a concept, *grima* (a 'nails on chalkboard' feeling), that is not labeled by a single word in English and varies substantively from its nearest conceptual neighbor, *disgust* (Schweiger Gallo et al., 2017). The cross-linguistic study of emotion words thus illuminates overarching similarities in the conceptualization of emotion as well as how concepts for specific emotions differ across the sociocultural contexts in which they occur.

However, these approaches tend to prioritize emotion category labels and features generated for definitional purposes—emphasizing central, stereotypical meanings. In contrast, the natural language that people use to describe their experiences of emotion provides a richer source of meaning, much of which arises from the surrounding context rather than specific emotion words (Capps & Bonanno, 2000; Majid, 2012; Ochs & Schieffelin, 1989). Consider the hypothetical descriptions provided in Table 1. They both describe a similar event (receiving a

rejection email at work) using the same emotion words, but each constructs the event in question in a different way. In both descriptions, the situation is perceived as unfair, yet while Description A intensifies hard feelings and turns the situation into an assertion of self-worth, Description B reflects and relativizes. These intuitions are borne out by looking at the aspects of experience the speakers attended to. In Description A, feelings are emphasized (as seen in the affect-related words of "content," "alone," and "care"). In Description B, it is thoughts (based on the cognition-related words of "understand," "decisions," and "probably"). Overall impressions are also bolstered by how the speakers position themselves relative to the event. Description A uses more first-person singular ('I') pronouns, suggesting a more personal and involved mode of processing, or psychological immediacy; in other words, the event is construed from the point of view of the experiencer. Description B instead uses second-person ('you') pronouns that suggest more impersonal, detached processing, or psychological distancing (e.g., Orvell et al., 2019). Even setting aside differences in other linguistic features (e.g., the use of present- versus past-tense verbs), these simplified examples serve to illustrate what can be learned about the understanding of emotional experience by looking beyond emotion category labels and their definitional properties.

Table 1. Hypothetical Event Descriptions

	Description A	**Description B**
Text	When I got the rejection email, I wasn't so upset at first, but rather surprised because I was content about the quality of my application, and I am someone who proved herself in the field. I do all the work in this company and now all the people except me get to go, and I am left alone, and nobody cares. I feel frustrated and disappointed.	Getting the rejection email wasn't so upsetting at first, but you know, you feel surprised if all your team got accepted and you the only one… And you were kind of working together on the project. It is hard to understand how people make these decisions. I felt frustrated and disappointed at the time. But it wasn't so important, probably it didn't mean anything.
Event	receiving a rejection email at work	receiving a rejection email at work
Emotion Words	"upset," "surprised," "frustrated," "disappointed"	"upset(ting)," "surprised," "frustrated," "disappointed"
Perspective	situation as unfair; assertion of self-worth	situation as unfair; reflection on standards
Features in Focus	Feelings (e.g., "content," "alone," "cares")	Thoughts (e.g., "understand," "decisions," "probably")
Speaker Positioning	Personal, involved (e.g., "I," "me," "my")	Impersonal, detached (e.g., "you," "your")

Indeed, a wealth of evidence in psychology and linguistics suggests that natural language provides insight into how people attend to and evaluate their experiences, and accordingly into their (inter)personal and emotional worlds. As shown in the hypothetical descriptions, language reveals which features of experience are being foregrounded – be it affective feelings, cognitive processes, bodily sensations, others' actions, or more (Boyd & Schwartz, 2021). For example, using a word counting approach (Linguistic Inquiry and Word Count [LIWC]; e.g., Pennebaker et al., 2015), Tsai and colleagues (2004) found that less acculturated Chinese Americans used more embodied (e.g., "dizzy") and more social (e.g., "friends") words than their more acculturated counterparts when describing emotional events. This finding joins evidence of

cultural variation in the extent to which emotion is conceptualized as a somatic vs psychological (e.g., Dzokoto, 2010; for a review, see Ip et al., 2023) and as a relational vs individual phenomenon (e.g., Kitayama et al., 2000; for review, see Mesquita, 2022). Language further reveals how the self is involved in the event in question – often, as shown above, through pronouns. The use of more first-person singular ('I') vs first-person plural ('we') pronouns is associated, across languages and over time, with more independent self-construal and cultural-level individualism (e.g., Twenge et al., 2013; Uz, 2014). Therefore, comparing cultures on a set of pre-specified, standardized word categories – including content (e.g., social, cognitive) and function (e.g., pronouns) words – shows how the same features differentially manifest in natural language, and is one of many ways that natural language descriptions shed light onto cultural differences in self-construal that are thought to inform the conceptualization of emotion.

Secondly, natural language descriptions of experience can provide more global insight into how people understand emotion by revealing the sorts of events they talk about and the relevant properties of those events. Examining the words people use based on their common patterns of co-occurrence, here referred to broadly as topic modeling (following Wilson et al., 2016), delivers a set of data-driven clusters of related words, or topics (e.g., a cluster with words like "friend," "plan," and "talk" would constitute the topic of 'socializing'; Hoemann, Lee, et al., 2023). Thus, topics can be used to inventory the types of events described. Topic modeling has also been used to identify data-driven collections of words by cultural group, exposing variation in how people describe emotion-relevant domains. For example, Ramírez-Esparza and colleagues (2012) applied a form of topic modeling (the Meaning Extraction Method [MEM]; Chung & Pennebaker, 2008) to personality descriptions from American English-speakers and Mexican Spanish-speakers. Despite similarities in the number of salient dimensions and content of some dimensions (e.g., 'sociability,' 'values,' 'hobbies'), there were dimensions unique to each group (e.g., 'fun' for Americans, 'relationships' for Mexicans), and these corresponded to established cultural scripts (e.g., Markus & Kitayama, 1991; see also Wilson et al., 2016). Similarly, comparing social media posts about mental health concerns, De Choudhury and colleagues (2017) found that western (American and British) English speakers referred more often to self-criticism and -destruction (e.g., "stop," "hate," "life") as well as to loneliness (e.g., "alone," "lonely," "people"), while majority world (Indian and South African) English speakers expressed more confessions and regrets (e.g., "faith," "regret," "strong") as well as bereavement and marginalization (e.g., "ashamed," "pretend," "struggle"). These differences in frequency reflect what is culturally salient by pointing (in)directly to what is valued (e.g., connection with others) or to what is novel or contested (e.g., self-concept). In either case, topic modeling studies demonstrate that – even within a relatively constrained domain (e.g., personality, mental health) – cultures vary in what they talk about, as well as in how they talk about it.

A third way that natural language descriptions reveal the understanding of emotion is by providing insight into the goals, beliefs, and norms people hold in this domain. These dimensions of understanding are more abstract (e.g., a belief that it is best to express one's emotions), in that they may take many different linguistic forms and they may emerge indirectly or sporadically (e.g., by an off-hand reference to the need to "get things off one's chest" or through descriptions of cathartic actions like crying and confession) rather than explicitly or consistently. Therefore, these manifestations are difficult to capture using pre-specified word categories or topics based on high-frequency words, and so must be identified using qualitative approaches (for discussion, see Capps & Bonanno, 2000; Edwards, 1999; Kleres, 2011). This approach has likewise illustrated cultural variation in the systems of meaning that inform the understanding and

experience of emotion. For example, Mesquita (2001) describes a set of annotated descriptions of emotional experience by speakers of Dutch, Surinamese, and Turkish living in the Netherlands. While the Dutch speakers – representative of individualistic cultural mores – focused on personal concerns and subjective feelings, Surinamese and Turkish speakers – representative of collectivistic cultural mores – grounded their emotions in assessments of social worth and saw the meaning of emotional situations as obvious (see also Marian & Kaushanskaya, 2004). Recently, Hoemann and colleagues (2023) conducted an inductive analysis of emotion descriptions gathered in semi-structured interviews with Hadza hunter-gatherers in Tanzania, and with students and community members in North Carolina. Hadza descriptions foregrounded action and bodily sensations, the physical environment, immediate needs, and the experiences of social others. North Carolina descriptions, by contrast, centered on the mental experiences of individuals, psychological context, and abstract goals that extended over time. Qualitative themes like these add depth to natural language analysis, offering a glimpse at the culturally-shaped conceptual models of emotion that may not be visible from patterns of individual words alone.

In sum, language analyses looking beyond emotion category labels and their definitional properties can illuminate emotional meaning-making in various ways. Word counting reveals the specific features of experience that are emphasized, offering insight into the ways in which emotions are conceptualized across cultures. Topic modeling uncovers the types of events people describe, revealing cross-cultural variation in the content of emotional experiences. Finally, qualitative analyses shed light on the underlying goals, beliefs, and norms, revealing how emotional experience is embedded in broader cultural frameworks. Together, these approaches show that language not only labels emotions but reflects the complex, culturally shaped ways people experience and interpret them.

Cultural Models of Emotion in the US and Belgium

In the present study, we used the three complementary approaches to language analysis reviewed above to investigate the cultural models of emotion held by US English speakers vs Belgian Dutch speakers. This specific pairing of samples offers several advantages. First, these groups share linguistic and historical characteristics that grant a direct and meaningful comparison (Majid et al., 2007; Majid, 2015). Often, cross-cultural and -linguistic studies leverage samples that diverge greatly on a dimension of interest, such as when comparing the United States (individualistic, Indo-European language) and China (collectivistic, Sino-Tibetan language). This commonly used approach maximizes the contrast that can be observed, illustrating a psychological or linguistic phenomenon at its most evident. Yet constraining a comparison to groups that are more alike or even related, as we do here, has advantages as well. Differences observed under more minimal conditions are less likely to be attributable to relevant variation in language structure or cultural dimensions such as economics, religion, or politics In the case of English and Dutch, both Western Germanic languages, similarities include morphology and grammar, pragmatic strategies (e.g., for politeness), and lexica that draw from the same etymological roots and influences (e.g., French). In the case of the US and Belgium, similarities include Christian religious foundations, participation in colonialism and industrialization, compulsory and advanced education systems, high individual and state wealth, and representative democracy, as well as being considered individualist countries by cultural psychologists (e.g., Triandis, 1995).

Furthermore, comparing these groups allows us to go beyond broad dichotomies such as "West vs. East" or "individualistic vs. collectivistic" cultures in cross-cultural psychology that often oversimplifies and essentializes cultural models, overlooking the cultural variants that exist worldwide (Kitayama & Salvador, 2024; Vignoles et al., 2016). Cultures are not monolithic, and emotional models can vary considerably even within regions that are typically grouped together. Indeed, despite being considered individualist countries by cultural psychologists in the East-West geographical comparison, there are still meaningful differences in how these two cultures implement individualism. In the US, the primary goal is the individual pursuit of happiness, which comes with the acceptance of unequal status (Hochschild, 1995; Kitayama et al., 2009). To attain happiness, individuals seek to stand out among others, to have high self-esteem, and to achieve personal success, even if these are at the expense of (relationships with) others (Heine et al., 1999; Oishi, 2010). Mastery and hierarchy – ambition, wealth, power – outrank harmony – equality, social justice, community (S. H. Schwartz & Ros, 1995). In Belgium, by contrast, the primary goal is to be integrated within a social network comprised of people of equal rights and status (Boiger et al., 2013). Therefore, fitting in, rather than standing out, is preferrable. This is achieved by overcoming differences between the self and others; from this standpoint, it is acceptable to sacrifice individual interests for the sake of equality. Values such as tolerance, welfare, and stability are more heavily weighted than in the US (Long, 1991; S. H. Schwartz & Bardi, 2001). These observations have prompted prior research to refer to Americans as endorsing a competitive or vertical form of individualism, with Belgians and other Western Europeans endorsing an egalitarian or horizontal form (Boiger et al., 2013; Singelis et al., 1995).

These differences in values and practices between US and Belgium also have bearing on overarching models of emotions prevalent in these cultural contexts. Previous research has demonstrated subtle differences in the emotions common to Americans and Belgians. Namely, Boiger and colleagues (2013) found that American children's books depicted more instances of anger than did Belgian books; Belgian books, in turn, depicted more instances of shame than the Americans (which depicted none). A similar pattern of results was found for the perceived occurrence of these emotions in each cultural context. While anger is associated with asserting individual needs, embodying an I-perspective (what I expect, want, and accept; e.g., Kuppens et al., 2007), shame is related to displaying concern for others, thus reflecting an other-perspective (what others expect, want, and accept; e.g., Tracy & Robins, 2004) – perspectives that might be differently prioritized in the US and Belgium. Complementing these findings, the authors also found that the concept of *anger* was more associated with aggressive vs distancing responses in the US than in Belgium, and that *shame* was equally associated with suppression vs seeking closeness in Belgium, whereas suppression prevailed in the US (Boiger et al., 2013). These findings regarding the depiction, occurrence, and concepts of anger and shame are thought to be linked to the social functions each of these emotions accomplishes (i.e., asserting individual needs vs. displaying concern for others), and whether this function helps achieve local cultural mandates. Therefore, the second advantage for comparing speakers of US English and Belgian Dutch is to provide an opportunity to explore nuanced differences in cultural models of emotions in groups that are traditionally seen as closely related.

To examine whether American and Belgian cultural models of emotion – and the values and practices that inform them – can be recovered from natural language, we analyzed semi-structured interviews in which participants in each sample described recent emotional events. These verbal descriptions of experience represent relatively unconstrained narratives that capture how people conceptualize emotion in everyday life (for discussion, see Hoemann, Gendron, et

al., 2023). Although some prior work has used interviews to directly probe folk understandings of emotion (e.g., by asking people to describe specific emotions; Hollan & Wellenkamp, 1994), here interviews are used to explore how people portray and reflect on lived experience, enabling us to assess how models of emotion may spontaneously manifest. As such, the present study centers on spontaneous descriptions of emotional experiences—regardless of whether emotion labels are used—and features that organically emerge.

We sought to answer two interrelated research questions: 1) What kinds of things are people talking about when it comes to their emotions? And 2) how do they talk about them? To address these questions, we conducted our analysis in three stages. To offer an initial insight into our data, we began by characterizing the contents of each cultural group's descriptions using topic modeling (following the MEM; Chung & Pennebaker, 2008), which primarily focused on the first question (i.e., *what*). Next, we counted the use of various function (e.g., personal pronouns) and content (e.g., emotion- vs. cognition-related language) word categories (using LIWC; Pennebaker et al., 2015), which primarily addressed the second question (i.e., *how*). Finally, we performed an inductive analysis of the occurrent themes (following Braun & Clarke, 2006), offering deeper insights into both research questions. In the following sections, we present the methods and results for each approach separately, followed by an integrated discussion.

Methods Overview

The data used in this study were collected as part of a larger research project examining the emotional acculturation of immigrant minorities and their social inclusion in the US and Belgium. All data were collected in line with the principles of the Declaration of Helsinki. The present analyses made use of the data from English-speaking American and Dutch-speaking Belgian and samples, which served as majority reference groups for the newcomers in the respective host countries. The study protocol was approved by the Institutional Review Board at the University of California, Santa Barbara (protocol 166-20-0785) and by the KU Leuven Social and Societal Ethics Committee (protocol G-2020-2139). Aspects relevant for the present analyses are reported in detail below.

Transparency and Openness

We report our sample size, all data exclusions (if any), and all measures relevant to the present study. Anonymized, preprocessed data and analytic code are available via a repository hosted by the Center for Open Science (OSF) at https://osf.io/7k49u/. To protect participant privacy, raw language data are not publicly available but will be shared directly upon request. Data were analyzed using the methods and software reported in the sections that follow. This study's design and its analysis were not preregistered.

Participants

Eligible participants were at least 18 years old, native speakers of the corresponding languages (English, Dutch), and citizens of the corresponding nations (USA, Belgium). Additionally, participants were excluded if they had a family history of migration in the prior two generations. This exclusion criterion was applied because the US and Belgian participants served as a comparison group for newcomer immigrants sampled as part of the overarching project.

A total of 100 US English-speaking and 100 Belgian Dutch-speaking adults were interviewed about recent emotional events. The US sample consisted of 59 women, 39 men, and 2 participants who indicated another gender identity, ranging in age from 18 to 78 years (M =

36.36 years, *SD* = 16.64), recruited through the University of California, Santa Barbara, Santa Barbara City College, and the Oxnard Adult School. The Belgian sample consisted of 53 women and 47 men, ranging in age from 18 to 71 years old (*M* = 38.47 years, *SD* = 14.78), recruited via personal networks and other convenience sampling strategies through KU Leuven and the surrounding community. Both samples were white and highly educated, with university-level coursework or degrees reported by 76% of Americans and 80% of Belgians.

All participants provided informed consent in their native language before beginning the study. As detailed below, participants first completed an online survey, for which they were remunerated $20/15€. Participants were then invited to be interviewed about a subset of their survey responses; those who opted in were remunerated an additional $15/20€. After the interview, participants could also complete an optional online task not included in the present analyses.

Procedure and Materials

All materials were presented in participants' native language, with the Dutch-language materials translated by members of the research team. Then, two native-speaker research assistants independently back-translated the materials into English. Discrepancies between the original English questionnaires and the back-translations were resolved through group discussions involving both back-translators and two members of the research team who were closely involved in developing the questionnaires. Data were collected in two phases: an initial online survey, followed by a semi-structured interview. Here we report aspects of the study relevant for the present analyses.

Online Survey (Emotional Patterns Questionnaire)

After confirming they met the eligibility criteria, participants received an email with a link to the initial online survey, hosted by Qualtrics. Participants first provided informed consent, and then completed a series of questionnaire measures including the Emotional Patterns Questionnaire (EPQ; De Leersnyder et al., 2011). The EPQ consisted of prompts asking participants to recall and briefly describe recent situations that evoked four types of emotions. Elicited situations were either positive (pleasant) or negative (unpleasant), and either socially engaging (relatedness-promoting) or socially disengaging (autonomy-promoting). In the 'positive engaging' situation, for example, participants are asked about a situation that made them feel good about their relationships with others, whereas in the 'negative disengaging' situation they are asked about a situation that made them feel bad about what someone else did (for specific prompts, see Table S1 in the Supplemental Material). The dimensions of valence and social engagement have been found to structure emotional experience across cultures (De Leersnyder et al., 2015; Kitayama, Mesquita, et al., 2006).

After describing each situation, participants rated the intensity of their emotions at the time of the event on 20 emotion terms using a 5-point Likert scale from 1 ("not at all") to 5 ("very strongly"). These ratings are not included in the present analyses. The entire online survey, including the EPQ, took about 40 minutes to complete.

Semi-Structured Interview

After completing the online survey, participants consented to take part in a semi-structured interview, in which they described the four EPQ situations in greater detail. Interviews were scheduled within seven days of the initial survey and conducted by research assistants

fluent in the respective languages. Due to COVID-19 regulations in place during data collection (US: April 2021-July 2022; Belgium: October 2020-April 2022), interviews were held online and recorded via Zoom.

During the interview, participants responded to a series of open-ended questions about the four situations given for the EPQ. Interviewers prompted participants to recall the situations in a set order (positive engaging, negative engaging, positive disengaging, negative disengaging), providing reminders about prior responses if necessary. For each situation, participants were asked about the time and place of the event, other people involved, subjective feelings, bodily sensations, and what they and others did. These elements are commonly cited as salient features or components of emotion (e.g., Frijda, 1986), and were intended to help participants relive and actively evaluate their experiences. For a full interview scheme, see page 2 of the Supplemental Material. Interview duration ranged between 30 and 60 minutes.

Data Preparation

Interviews were transcribed by separate groups of research assistants fluent in the respective languages. Transcripts were then manually split by situation type, yielding up to four documents per participant or 400 per cultural group. In a few cases, participants could not report on the desired situation type, resulting in missing data for 3 US situations (new total 397). For the topic modeling and word counting analyses, interviewer speech was removed from the transcripts using freely-available software (BUTTER version 0.9.4.1; Boyd, 2019). For topic modeling, these participant-only, situation-level documents were further split by sentence and short sentences (<15 words long) were removed, following recommendations (Boyd, 2017). Splitting the documents into sentences increases the number of texts submitted to the model; as these texts are shorter, the model can recover more coherent patterns of word co-occurrence (for model details, see below). Shorter sentences often lack sufficient contextual or semantic information; removing them helps ensure that each remaining text unit contains enough meaningful content for the model to assess. To ensure that topics were not driven by participants who spoke more than others, we assessed word and sentence counts per situation and removed participants with any value more than 3 SDs above the mean (5 American, 2 Belgian participants). The topic modeling analyses ultimately encompassed 95 American interviews (377 situations, $M = 2033.00$, $SD = 106.61$ sentences per situation type) and 98 Belgian interviews (392 situations, $M = 3113.25$, $SD = 345.78$ sentences per situation type). For details, see Table S2 in the Supplemental Material.

Approach 1: Topic Modeling

In the first stage of our analysis, we characterized the contents of American and Belgian interviews using topic modeling. This enabled us to identify the contexts and dimensions of emotional situations that were salient for each cultural group and assess the extent to which these were overlapping versus unique (e.g., Ramírez-Esparza et al., 2012).

Analysis

We followed the Meaning Extraction Method (MEM) topic modeling approach (Chung & Pennebaker, 2008). Initial analyses including all documents per cultural group produced vague and generic topics. To enhance interpretability, we conducted separate topic modeling analyses per situation type (positive engaging, negative engaging, positive disengaging, negative disengaging). We first prepared the data for analysis using the Stanza natural language

processing (NLP) package (Qi et al., 2020) in Python (version 3.9.13). Each sentence was stripped of punctuation, divided into words (i.e., tokenized), and lemmatized. Lemmatization is the process of reducing words to their root forms (i.e., lemmas) based on their intended meaning in context, such as when "meeting" becomes "meet" when used as a verb (e.g., "we are meeting tomorrow") but remains "meeting" when used as a noun (e.g., "our meeting is tomorrow"). That is, lemmatization removes inflected word forms, retaining a set of 'core' meanings for subsequent analysis. After lemmatization, we used the Meaning Extraction Helper software (MEH version 2.3.02; Boyd, 2018) to remove common closed-class or 'stop' words (e.g., articles, auxiliary verbs, prepositions, pronouns). Using stop lists to exclude generic or non-content words helps reduce noise, enhance topic specificity, and improve interpretability, as these common words occur frequently across many contexts and do not contribute meaningful information about the unique content of the topics. We supplemented the default English stop provided by the MEH (Boyd, 2018) list with common adverbs (e.g., "specifically," "extra"), modal and generic verbs (e.g., "must," "take"), and hesitations and filler words (e.g., "hmm," "blah"). We created a stop word list for Dutch by first extracting raw word frequencies from the Belgian interviews, and then manually reviewing all words that occurred at least five times. We validated and augmented our Dutch stop word list by merging it with several publicly available lists (e.g., https://github.com/stopwords-iso/stopwords-nl).

Using the prepared data for each cultural group, we identified the most frequent content words and their locations in the sentences, which we also completed using the MEH. The result was a binary co-occurrence matrix in which single words (i.e., unigrams) that appeared in at least 0.5% of the data (i.e., approximately 10-20 sentences) were coded as present (1) or absent (0) in each sentence. An average of 180.25 (SD = 8.06) and 154.00 (SD = 3.92) content words were retained for American and Belgian situations, respectively (see Table S2 for details). These numbers are in line with prior MEM analyses, suggesting that the retained content words are sufficient to produce meaningful topics (e.g., Rodríguez-Arauz et al., 2017). Next, we extracted topics, or words that consistently grouped together across sentences within each cultural group, by submitting the binary co-occurrence matrix to a principal components analysis (PCA) with varimax rotation. PCAs were performed in R (R Core Team, 2020) using packages *psych* (Revelle, 2020) and *factoextra* (Kassambara & Mundt, 2020). Inspection of the scree plots for the PCAs suggested approximately 10-15 components at the "elbow" with eigenvalues above 1 (Cattell, 1966). See Table S2 in the Supplemental Material for diagnostic tests and potential elbows per situation type. Each potential solution was manually reviewed by the first (English- and Dutch-speaking) author in consultation with the second (English) and fifth (English, Dutch) authors, to ensure that the sets of topics produced were coherent and comparable. To maximize the variance accounted for in the data, and to facilitate direct comparison, we retained 15 components per situation type, or 60 per cultural group. Instructions and analytic code are available at https://osf.io/7k49u/. The full sets of topics are presented in Tables S3-4 in the Supplemental Material. Below, we present key similarities and differences, which we illustrate using example topics and word clouds.

Results and Discussion

Overall, US English speakers and Belgian Dutch speakers talked about similar types of events. For illustrative purposes, we use positive disengaging[1] situations as an example, presenting the full set of topics in each cultural group (15 per culture) in Table 2, including our interpretation of the topics (i.e., *Description* columns), example words that load highly on the topics, and overarching domain(s) (e.g., social, professional life) we used to classify the topics. Similar observations apply across other situation types and to the full set of topics, which is presented in Tables S3-4 in the Supplemental Material.

As exemplified in Table 2, topic similarities touched on social relationships (row 1), communication (row 6), professional life (i.e., school and work; row 10), and emotions (row 14). Despite these overarching similarities, we observed meaningful differences in both the distribution and specific contents of topics. The clearest distributional contrast emerged between emotion-focused topics and communication-focused topics. American interviews revealed a broader range of emotional topics, including topics surrounding context-specific emotions (e.g., 'Accomplishment and Pride', Table 2, row 11), whereas Belgian topics about emotion remained more generic (e.g., 'Positive Emotions', Table 2, row 14). In positive disengaging situations alone, there were 4 American topics and only 1 Belgian topic related to emotion. In line with prior research, this observation suggests that Americans placed a stronger emphasis on emotions and their open expression (e.g., Wang, 2001). Belgian interviews, by contrast, revealed a larger palette of topics about communication, discussion, and problem solving. In positive disengaging situations, there were 4 Belgian topics and only 1 American topic related to communication. This pattern supports the concept of the 'Belgian compromise,' or the cultural emphasis on negotiating one's viewpoints with others (e.g., van de Craen, 2002; Sels et al., 2000; see also Boiger et al., 2013).

[1] We use the term "disengaging" to refer to situations whose central emotional meaning involves distancing the self from others, even if the context itself may contain active or intense interactions. This follows the conceptualization of engaging vs. disengaging emotions in prior work (e.g., (Kitayama, Mesquita, et al., 2006), which emphasizes the relational meaning of the situation rather than its level of social activity.

Table 2. Topics Extracted from American and Belgian Interviews on Positive Disengaging Situations

	American Topic			**Belgian Topic**		
	Description	*Example Words*	*Domain*	*Description*	*Example Words*	*Domain*
1	Family Meals	food, house, eat, kid, dinner	*Social*	Family	sister, girlfriend, mom, parent	*Social*
2	Personal Relationships and COVID-19	real, event, live, relationship, covid	*Social*	Home and Family Life during Pandemic	house, walk, child, daughter, corona	*Social*
3	Family Trip	trip, road, mom	*Social/ Activities*	Appreciating Special Occasions	take place, fine, pleasant, important, together	*Social/ Activities*
4	Sharing Exciting Moments with Family	skate, watch, girl, excite, sister	*Social/ Activities*	Conversations and Interactions	each other, person, know, talk, woman	*Social/ Communication*
5	Time Spent Together (at work)	hour, spend, time, together, work, company	*Social/ Professional life*	Relationships and Communication	friend, family, person, contact, talk	*Social/ Communication*
6	Phone Communication	phone, number, call, name, easy	*Communication*	Communication	begin, tell, week, react, wait	*Communication*
7	School	school, high, college, past, young	*Professional life*	Communication and Problem Solving	send, mail, late, solve, answer	*Communication*
8	Accomplishment in School	grade, assignment, complete, week, easy	*Professional life*	Personal and Professional Connections	personal, business, together, colleagues, call back	*Social/ Professional life*
9	Online Training	train, break, small, tire, room	*Professional life*	Working Hard	work, hard, continue working, year, end	*Professional life*
10	Career and Life Goals	continue, job, life, career, goal, future	*Professional life*	School and Opportunities	school, start, chance, big, new	*Professional life*
11	Accomplishment and Pride	accomplishment, pride, happiness, sense, win	*Emotion/ Professional life*	School and Difficulties	student, year, teacher, difficult, school	*Professional life*
12	Positive Emotional Reactions	reaction, physical, smile, hope, thank	*Emotion*	Work Life and Team Work	team, boss, group, each other, company	*Professional life*
13	Emotional Struggles and Anxiety	fight, positive, anxiety, emotion, interaction	*Emotion*	Studying and Daily Life	evening, long, live, study, week	*Daily/ Professional life*
14	Honesty and Anxiety	honest, anxious, reason, speak, fact	*Emotion*	Positive Emotions	propose, satisfied, joy, body, feelings	*Emotion*
15	Car and Time Management	guy, tire, spend, car, race, change	*Miscellaneous*	Energy and Daily Activities	energy, nice, day, follow, physical	*Miscellaneous*

Note. The classification of topics into domains is not mutually exclusive. Belgian topic words have been translated from Dutch to English for presentation only.

There were also differences in the content of topics. Panel A of Figure 1 illustrates two of these differences in the domain of relationships. When describing positive contact, Americans often highlighted high-arousal, exciting emotional experiences like celebrating together (upper left). Belgian descriptions of positive contact reflected a more tempered demeanor, referenced fewer high-arousal emotions, emphasizing pleasant and enjoyable experiences in rather mundane settings (upper right). A similar pattern emerged in descriptions of negative emotions in conflict situations. Americans described confrontational instances where they expressed negative emotions openly and with high intensity (e.g., using words like "cry" and "yell"; lower left). This suggests that Americans did not exclusively express their "ideal" positive emotions (Tsai, 2007). Although this might seem contradictory to prior findings suggesting that Americans prefer to avoid negative emotions (e.g., Koopmann-Holm & Tsai, 2014), such expressions (e.g., anger) may serve the cultural goal of asserting one's needs and desires. This aligns with the competitive nature of American society, as opposed to the more egalitarian context of Belgium (Boiger et al., 2013). Belgian participants, by contrast, more often described how they refrained and regulated their feelings and behaviors (lower right).

Panel B of Figure 1 illustrates content differences in the domain of professional life. American topics (lefthand column) reflected an emphasis on personal achievements, career aspirations, and orientation toward results. This aligns with the previous theorizing on US culture, where standing out among others and maintaining high self-esteem are key to achieving individual success (Boiger et al., 2013; S. H. Schwartz & Ros, 1995). Belgian topics (righthand column), on the other hand, acknowledged the challenges of balancing work and private life, with a focus on collaboration and a process-oriented approach, where the contributions of others as well as the hard work involved in achieving the successful outcome are recognized and appreciated. This reflects the "egalitarian" individualism prevalent in Belgium, where integrating within a social network consisting of individuals with equal rights is prioritized over individual achievements in a competitive setting (Boiger et al., 2013; S. H. Schwartz & Ros, 1995; see also Ellis, 2012).

This analysis allowed us to identify the contexts and domains (e.g., relationships, professional life) that most prominently contribute to everyday experiences of emotion among English-speaking Americans and Dutch-speaking Belgians. The results broadly answered the question of *what* kinds of topics Americans and Belgians discuss when describing emotional events, while also revealing differences reflective of broader cultural norms and values. Nevertheless, a closer examination of linguistic features might uncover more subtle distinctions and further clarify the contrast between these cultural groups: that is, deeper insight could be gained by exploring *how* people talk about these topics. It is also worth noting that the results presented here were based on the most frequently used content words in each cultural group, excluding rare words, function words (e.g., pronouns), and short sentences, all of which could provide additional insight into how emotions are conceptualized.

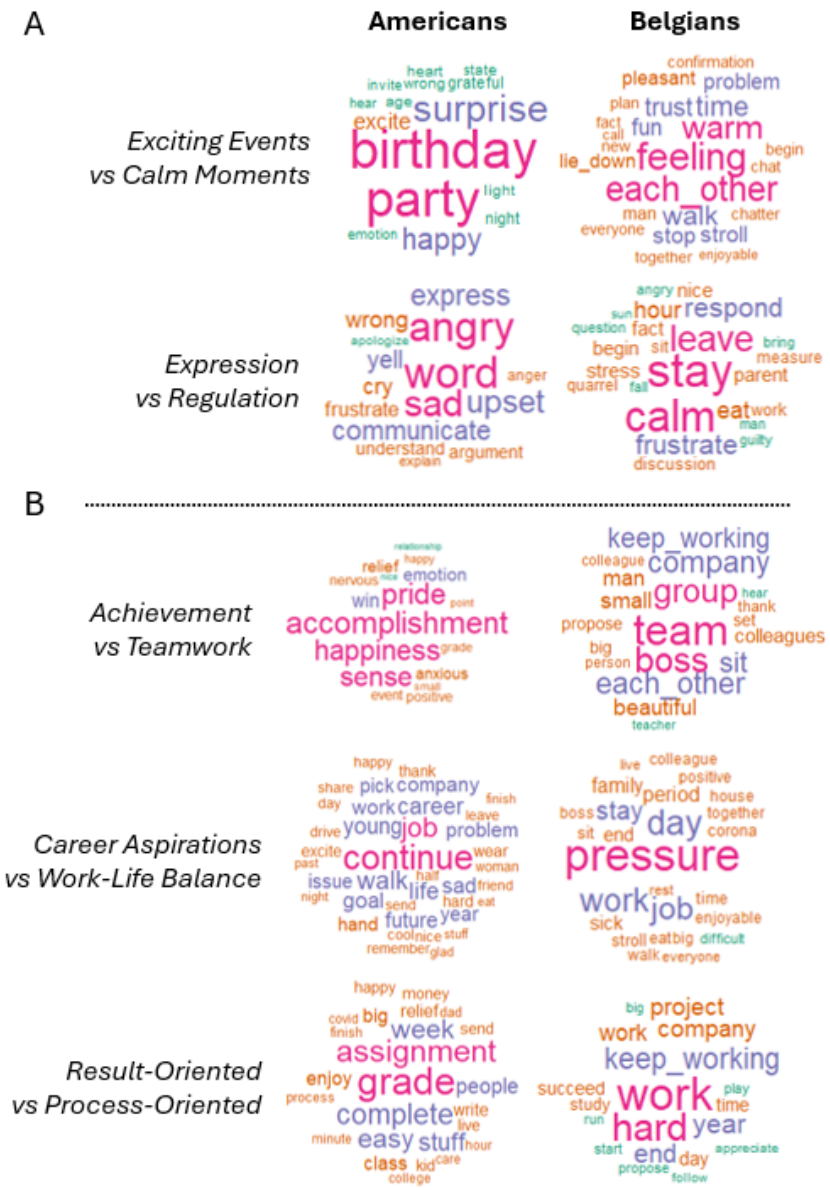

Figure 1. Word clouds for example themes illustrating different emphases of Americans and Belgians while talking about relationships (panel A), and while talking about professional life (school and work; panel B). Clouds were generated directly from the topic modeling outputs. For each topic, words were weighted by their loading and displayed in proportion to this weight: words with higher loadings appear in larger font sizes. Belgian topic words have been translated from Dutch to English for presentation only.

Approach 2: Word Counting

In the second stage of our analysis, we counted the use of various function and content word categories. This enabled us to quantify the linguistic resources that Americans and Belgians were using to realize the topics previously discovered, illuminating finer-grained patterns of attention and evaluation in the conceptualization of emotion (e.g., Tsai et al., 2004).

Analysis

Transcripts were processed using Linguistic Inquiry and Word Count (LIWC). LIWC is a text analysis program that counts the percentages of words in a given document that belong to a set of predefined, psychologically meaningful categories.

Comparing LIWC results across languages poses a challenge, as differences may arise not only from the narratives themselves but also from structural differences between languages and from the dictionaries used. Differences across languages such as baseline frequencies of function words like pronouns and tendency for word compounding might impact the comparisons. Moreover, the English LIWC2015 dictionaries were developed bottom-up (Pennebaker et al., 2015), whereas the Dutch version is a translation of the English dictionaries (Van Wissen & Boot, 2017). This raises the possibility that certain Dutch words may be omitted or differ in relevance across languages. To address these concerns, we conducted three sets of comparisons. First, in the original-language comparison, American narratives were analyzed with the English LIWC dictionary and Belgian narratives with the Dutch LIWC translation. Second, in the English-only comparison, both American and Belgian narratives were analyzed with the English LIWC dictionary, with the Belgian texts machine-translated into English (*DeepL*; March 2022). Third, in the within-Belgian comparison, Belgian narratives were analyzed in both their original Dutch (with the Dutch LIWC translation) and in English translation (with the English LIWC dictionary). We report the statistics from the original-language comparison to preserve participants' language of expression, while the other two comparisons serve as robustness checks, allowing us to evaluate whether observed group differences reflect genuine content patterns rather than artifacts of language structure or dictionary construction.

We considered a LIWC category to indicate a credible cultural difference if three conditions were met: (1) The effect in the original data (US English vs. Belgian Dutch) and the effect in the within-language comparison (US English vs. translated Belgian English) were in the same direction; (2) The effect sizes in these two comparisons were of similar magnitude, indicating that the difference was not driven by language structure or dictionary differences; (3) The effect in the within-culture comparison (original Dutch vs. translated Dutch) did not mirror the cross-cultural effect, suggesting that the result was not simply a by-product of translation. When the within-language effect was consistent in direction but smaller in magnitude than the original effect, we treated the original effect as credible but likely inflated. Categories showing inconsistent patterns across these comparisons were considered unreliable and excluded from interpretation.

Our final comparison consisted of 73 categories that were present in LIWC2015, including both function (e.g., 'I' pronouns) and content (e.g., social) words, where categories are not necessarily mutually exclusive (e.g., "they" belongs to categories for 'they' pronouns and social processes). In processing the transcripts, we noticed that the English and Dutch LIWC dictionaries did not have equivalent coverage of our data, capturing a higher percentage of words in the US transcripts (M = 96.14%, SD = 1.49%) than in the Belgian transcripts (M = 89.24%, SD = 2.41%), $t(667.29) = -48.62$, $p < .001$, two-tailed, equal variances not assumed. To account for

this difference, we corrected all LIWC scores in analyses involving Dutch LIWC, by dividing the percentage of words counted for each category by the percentage of words in each transcript captured by LIWC. For example, the percentage of affect words ('affect' variable) was divided by the percentage of words covered by LIWC ('Dic' variable) and then multiplied by 100 (to yield a percentage). Finally, LIWC scores were aggregated per participant by taking the mean across all situations.

We used the LIWC scores to investigate potential differences in the linguistic resources Americans and Belgians used to describe experiences of emotion. To guide this investigation, we conducted a series of independent samples *t*-tests across all 73 LIWC categories. We report and interpret the results of these comparisons in terms of their effect sizes (Cohen's *d*), rather than their statistical significance, given our interest in characterizing the linguistic resources used by our samples. A sensitivity analysis conducted in G*Power (Faul et al., 2009) indicated that a sample size of 100 per cultural group (200 total) is sufficient to detect effects of $|d| \geq .40$ in independent samples *t*-tests assuming $\alpha = .05$ (two-tailed) and power $(1-\beta) = .80$. The full set of comparisons—including those that were flagged as suspect or underpowered—is provided in Table S5. Instructions and analytic code for all analyses are available at https://osf.io/7k49u/.

Results and Discussion

Table 3 presents the comparisons on 28 LIWC categories that passed our robustness checks and had effect sizes that were powered to detect[2], along with the corresponding effect size estimate (*d*) and direction (US vs Belgium).

American participants used more first-person singular ('I') pronouns when narrating (recent) emotional events (e.g., "I," "me," "my"; $d = -1.29$). This was consistent with prior work, suggesting that the Americans foregrounded themselves and personal relevance more so than the Belgians (e.g., Uz, 2014; Wang & Conway, 2004). They also used more affective language ($d = -1.85$), regardless of whether it was positively (e.g., "cute," "fun," "love"; $d = -1.53$) or negatively valenced (e.g., "ugly," "weird," "hate"; $d = -1.27$). This pattern aligns with evidence that Americans express emotions openly (e.g., Rychlowska et al., 2015). In keeping with this focus, American participants referred more often to feelings (e.g., "ache," "feeling," "pain"; $d = -1.21$). They used more language related to bodily sensations and processes (e.g., "itch," "stomach," "pulse"; $d = -1.04$), including their health (e.g., "sick," "doctor," "tired"; $d = -0.77$). Additionally, their narratives included more references to rewarding experiences (e.g., "goal," "success," "win"; $d = -1.87$), opportunities for play (e.g., "party," "sports," "TV"; $d = -0.69$) and religious beliefs (e.g., "god," "blessed," "Christmas"; $d = -0.48$). Taken together, American emotional narratives were more affectively and physically involved, and that they more often included references to hedonic outcomes such as reward and play.

In contrast, Belgian descriptions were more distanced in tone, signified by fewer references to first-person pronouns and more impersonal pronouns (e.g., "it", "those" [example words given in English for presentation only]; $d = 0.92$). Their language also featured more relativizers (e.g., "bigger," "further," "soon"; $d = 1.25$) and markers of difference or contrast (e.g., "actually," "different," "rather"; $d = 1.89$), possibly signifying greater qualification and comparison of ideas. At the same time, Belgians used more words conveying epistemological or deontological certainty (e.g., "absolutely," "indeed," "must"; $d = 1.15$). It is possible that this

[2] This approach aligns with recommendations to focus on effect sizes rather than dichotomous significance testing (Cumming, 2014), and to use sensitivity analyses to ensure that reported effects are large enough to be reliably detected with the sample at hand (Lakens, 2022).

language was used in coordinating higher-level values (Sels et al., 2000; van de Craen, 2002), reflecting the greater emphasis of Belgians on fitting in and thus conforming to social norms; however, it is also possible that Belgians spoke more confidently than might be assumed based on their dispreference for social competition (Boiger et al., 2013). Compared to Americans, Belgians also referred more to risk (e.g., "avoid," "difficult," "careful"; $d = 0.41$) and time (e.g., "hour," "hurry," "week"; $d = 2.57$), which could point to a more pragmatic if not cautious or pessimistic outlook (e.g., Koopmann-Holm & Tsai, 2014; see also Ellis, 2012), as opposed to the focus on rewards and positive outlooks seen in American descriptions.

Not all our observations were as clearly in line with expectations, however. For example, we found that American participants used more language related to social relationships (e.g., "sharing," "meet," "group"; $d = -0.67$), which seems to contradict theories and evidence that Americans focus less on interpersonal relationships (e.g., Heine et al., 1999; Tsai et al., 2004). The present finding may point out important boundary conditions to when and how American experiences of emotion involve social others—such as parties or social celebrations, as evidenced by the topic modeling results. Alternatively, it may result from differences in how independent versus interdependent selves view relationships. In more collectivistic cultures where social roles and group memberships are integral to the self, relationships may be seen as inherent and stable (e.g., Markus & Kitayama, 1991). In more individualistic cultures, where relational mobility is higher (i.e., forming new connections and breaking the old ones are easier), people may actively invest in and reflect on their relationships more often (e.g., Schug et al., 2010).

Other differences point to variation in temporal framing and cognitive focus. Belgians tended to refer to events and actions happening in the present (e.g., "keeps," "appears," "today"; $d = 1.38$), as well as to those planned for the future (e.g., "ahead," "plan," "tomorrow"; $d = 4.17$). Americans, on the other hand, used more words reflecting on the deeper meaning of events (e.g., "realize," "understand," "learn"; $d = -0.57$) and related to hesitation (e.g., "confused," "wonder," "guess"; $d = -1.37$). This could be due to Americans' desire to find the positive, or areas of growth, from negative experiences (Koopmann-Holm & Tsai, 2014). Alternatively, it could be due to Americans recalling experiences that were further in the past (which would also explain why Belgians used more language with a focus on the present or future). To adjudicate between these and other possible interpretations, additional analyses are needed that provide more context for the words participants used.

Table 3. LIWC Comparisons Between American and Belgian Interviews (Selected Subset)

Category	**LIWC Reference**	**Example Words**	**Effect Size (*d*)**	**Direction**
Common Verbs	verb	eat, come, carry	-2.16[i]	US
Reward	reward	take, prize, benefit	-1.87[i]	US
Affective Processes	affect	happy, cried	-1.85[i]	US
Personal Pronouns	ppron	I, them, her	-1.61[i]	US
Drives	drives	ally, superior, benefit, danger	-1.59[i]	US
Positive Emotions	posemo	love, nice, sweet	-1.53[i]	US
Tentative	tentat	maybe, perhaps	-1.37[i]	US
First-Person Singular (I) Pronouns	i	I, me, mine	-1.29	US
Negative Emotions	negemo	hurt, ugly, nasty	-1.27[i]	US
Feel	feel	feels, touch	-1.21[i]	US
Biological Processes	bio	eat, blood, pain	-1.04[i]	US
Anxiety	anx	worried, fearful	-0.85	US
Health	health	clinic, flu, pill	-0.77[i]	US
Leisure	leisure	cook, chat, movie	-0.69[i]	US
Affiliation	affiliation	ally, friend, social	-0.67[i]	US
Anger	anger	hate, kill, annoyed	-0.64[i]	US
Insight	insight	think, know	-0.57	US
Ingestion	ingest	dish, eat, pizza	-0.54[i]	US
Religion	relig	altar, church	-0.48[i]	US
Future Focus	focusfuture	may, will, soon	4.17[i]	BE
Time	time	end, until, season	2.57[i]	BE
Differentiation	differ	hasn't, but, else	1.89[i]	BE
Present Focus	focuspresent	today, is, now	1.38[i]	BE
Relativity	relativ	area, bend, exit	1.25[i]	BE
Certainty	certain	always, never	1.15[i]	BE
Impersonal Pronouns	ipron	it, it's, those	0.92	BE
Hear	hear	listen, hearing	0.59	BE
Risk	risk	danger, doubt	0.41	BE

Note. This table includes all LIWC categories that (1) had effect sizes large enough to be reliably detected given our sample size and (2) passed robustness checks comparing original Belgian transcripts, machine-translated Belgian transcripts, and American transcripts (see Methods and Supplemental Material). Categories are grouped by cultural direction and, within each group, sorted by the absolute magnitude of the effect size. Example LIWC words are given for English only; Belgian descriptions were analyzed in Dutch. *Direction* indicates which cultural group used the category more frequently (e.g., *US* = US > BE). "Inflated" effects (superscript *i*) were credible but likely exaggerated due to language structure or dictionary differences.

Approach 3: Thematic Analysis

In the third stage of our analysis, we performed an inductive analysis of the occurrent themes. This purely qualitative step enabled us to capture higher-level interpretations and outlooks (e.g., Hoemann, Gendron, et al., 2023) in American and Belgian emotional descriptions. Our intuitive observations shed new light on emotional experiences and help us better understand our previous findings. Moreover, juxtaposing these observations with the findings from our prior automated analyses provides important tests of face and convergent validity for the preceding results: Does what we take away from the interviews match with our conclusions from the topic modeling and word counting analyses?

Analysis

We coded each set of interviews separately, following an iterative review process similar to the reflexive approach described by Braun and Clarke (2006, 2022). This approach emphasizes the researchers' active, interpretive role in meaning-making, such that the quality of coding is assessed not on its reliability across multiple coders but on its depth of subjective engagement with the data. To ensure thorough engagement with the texts and interpretation by both cultural insiders and outsiders, two of the authors served as the coders for each group. The first author (from the US) and third author (from Belgium) developed the codes for the American interviews. The first author also worked with the fourth author (from Belgium) to develop the codes for the Belgian interviews. In each case, a subset of eight transcripts was randomly selected to balance participant gender and age. The coders independently read through the entire transcripts in the original language, noting salient observations about what participants included in their descriptions of recent emotional events. For example, the note "importance of telling others what you feel, what is going on with you" might refer to a statement about needing to disclose feelings to a friend. Notes that captured a similar meaning were subsequently merged into a single code (e.g., "getting emotions out"). Codes were progressively reviewed, refined, and pruned through regular discussion, until a stable set of codes was reached. These codes were then used to manually annotate a further 42 transcripts (once again balanced for gender and age), for a total of 50 interviews per cultural group. Manual annotation occurred in ATLAS.ti Web (version 5.21.2): interviews were annotated by the first, third, and fourth authors; the second author also assisted with the annotation of the American interviews. To facilitate cross-cultural comparison, we selected parallel subsets of codes related to cultural models of emotion and organized these into overarching themes per cultural group. For example, the US code 'focusing on the positive' and the Belgian code 'avoiding negative affect' represent themes for positive and neutral emotions, respectively. The full set of code-theme mappings is available via our OSF repository (https://osf.io/7k49u/). Below, themes are exemplified using representative codes and quotations from the interviews.

Results and Discussion

Table 4 illustrates prominent cultural differences in the emotional tone and regulation strategies present in the narratives. Americans (left-hand column) gravitated toward pleasant, intense, and expressive emotions: they highlighted the positive (row 1), described states of high energy or activation (row 2), and wanted to get emotions out (row 3). Belgians (right-hand column), by comparison, gravitated toward neutral, calm, and regulated emotions: they avoided the negative (row 1), remained collected (row 2), and preferred to control their feelings (row 3). These differences are consistent with prior findings that Americans tend to value (the expression

of) high-arousal positive emotions like excitement and pride (e.g., Rychlowska et al., 2015; Tsai, 2007), and often frame personal achievement through praise and positive self-regard and a hesitancy to talk about (or a reframing of) failures (e.g., Ehrenreich, 2009; Hedderich, 1999; Imada & Ellsworth, 2011). Although prior research has shown that Western European cultures (e.g., Germans) may exhibit greater acceptance of negative emotions (Koopmann-Holm & Tsai, 2014), our Belgian participants emphasized emotional moderation and avoidance of negativity more often than their American counterparts. This pattern may indicate that cultural models within Europe differ in their acceptance of negative emotions, or alternatively, that Americans manage negative emotions not by suppressing them but by channeling them into more positive, growth-oriented narratives.

Table 4. Inductive Themes from American and Belgian Interviews: Approaching Feelings

Americans			**Belgians**		
Theme	Example Code	Example Quotation	Theme	Example Code	Example Quotation
Positive	*Focusing on the positive*	It was good to see that there was some benefit to all the sleepless nights.	Neutral	*Avoiding negative affect*	I'd much rather stay closed off and avoid it or not think about it at all.
Intense	*Maximizing positivity*	It was very positive, like we're going to do great on this test. Just a lot of positive, uplifting statements.	Calm	*Ideal affect is calm and collected*	I always stay very sober about it. I mean, I'm not going to jump and dance!
Expressive	*Getting emotions out*	I felt great because I felt like I blew off some steam.	Regulated	*Emotion regulation*	When those words are out, I try to keep it sober and neutral. I'm never going to let my emotions take over by shouting loudly or whatnot.

Note: Belgian quotations have been translated from Dutch to English for presentation only.

Table 5 illustrates cultural differences in the values and goals that emerged in the interviews as informing cultural models of emotion. As can be seen in the left-hand column, Americans recurred to themes of individuality, social hierarchy, and personal impact. They did this by differentiating themselves from others (row 1), describing themselves as the protagonist in the story (row 2), and underscoring the importance of events for their own plans and feelings (row 3). These themes are in line with the importance of standing out and being unique (e.g., Heine et al., 1999), focusing on events' meaning for the individual self (e.g., Wang & Conway, 2004), and US culture's emphasis on personal achievement (e.g., Oishi, 2010). In contrast, as can be seen in the right-hand column of Table 5, Belgians recurred to themes of concern for and accommodation to others, social equality, and broader worldview. They did this by accommodating to others (row 1), promoting egalitarianism (row 2), and referring to their values (row 3). These themes correspond with Belgium's scores on Schwartz values of egalitarianism and universalism (S. H. Schwartz & Bardi, 2001), as well as prior descriptions of Belgians as more likely to adopt a democratic attitude (e.g., Heylighen, 1998). Taken together, these qualitative themes support the idea that cultural models of emotion are embedded in broader systems of value, identity, and relational orientation.

Table 5. Inductive Themes from American and Belgian Interviews: Values and Goals

Americans			**Belgians**		
Theme	Example Code	Example Quotation	Theme	Example Code	Example Quotation
Individuality	*Putting oneself first*	When I was called out, it made me feel really good compared to them.	Accommodation to Others	*Attention, concern, accommodation, empathy to others*	I'm not a fan of team-building days, but some people are…I try to make it pleasant for the rest as well.
Social Hierarchy	*Seeing oneself as the protagonist or hero*	And my kids are looking at me like I'm a god or something.	Social Equality	*Respect, equality, peerhood*	In fact, we are all just equal. Even if you are the king of Belgium, I don't care.
Personal Impact	*Making things personally meaningful*	This is extremely important because I was hiding at home, being miserable. You know, I need to live my life, and I need to be happy.	Broader Worldview	*Personal standards, values*	It's a democracy that everyone can vote, but someone can hardly be in my circle of friends if they are racist.

Note: Belgian quotations have been translated from Dutch to English for presentation only.

General Discussion

Cross-cultural studies of emotion language most often focus on whether cultural groups differ in their words for emotion, what those words mean, or how those words are used. In the present study, we took a broader view of emotion language to examine what people are talking about, and how they talk about it, when they reflect on everyday experiences of emotion. Using three separate yet complementary approaches to language analysis –topic modeling, word counting, and thematic analysis – we triangulated the conceptualization of emotion in speakers of US English and Belgian Dutch. We found, broadly, that American and Belgian cultural models of emotion (Boiger et al., 2013) could be distinguished from descriptions of recent emotional events, even though participants described similar types of emotional situations and were not asked directly about their understandings or beliefs about emotion. Moreover, these event descriptions substantiated prior hypotheses and observations about the values and practices that support, and are supported by, cultural differences in emotion (e.g., Hoemann, Gendron, et al., 2023; Koopmann-Holm & Tsai, 2014; Markus & Kitayama, 1991; Mesquita, 2001). Natural language descriptions of emotional events bear traces of underlying cultural systems of meaning; they can be used to gain access to more than repertoires, semantics, and use of emotion words.

Overarching Cultural Patterns: American and Belgian Models of Emotion

Two overarching observations emerged in our comparison of US and Belgian models of emotion, which were consistent across all approaches taken in the present study as well as with the findings of previous research. First, Americans and Belgians placed differential emphasis on intense emotions. Americans described having or desiring experiences with higher energy levels – surprise parties, hard-won victories, unexpected emergencies, loud fights – while Belgians referred to experiences with lower energy levels – family dinners, woodland walks, methodical

solutions, quiet frustration. These themes were evident in topic modeling results (Figure 1), in the relative frequency of use of affective and bodily language in word counting analyses (Table 3), as well as in the emergent qualitative codes (Table 4). These patterns also fit with prior work showing that Americans seek and benefit from high-arousal emotions more than other cultural groups (e.g., Clobert et al., 2020; Tsai, 2007); while Belgian emotional discourse may reflect a more moderate, socially attuned ideal—one that prizes equilibrium and de-emphasizes extremes of emotional display.

The second overarching observation is that Americans and Belgians differed in their focus on competition versus collaboration. Whereas US participants tended to describe personal concerns and achievements, Belgian participants elaborated more on interpersonal coordination and communication. This was especially apparent in topics related to professional life but showed up more generally in how Americans used more first-person pronouns, and reward- and achievement-related language, and portrayed themselves as protagonists; while Belgian participants were more distanced in tone and used more qualifying and comparative language and often articulated broader worldviews and values. These findings fit with prior work on basic cultural values (S. H. Schwartz & Ros, 1995), according to which Americans prioritize personal success and meaning (e.g., Oishi, 2010; Wang & Conway, 2004) and Belgians prioritize societal integration and consensus (e.g., Boiger et al., 2013).

Added Insight through Triangulation

Our triangulated approach yielded richer and more layered insights than any single method could provide, as they converged and enriched one another. For example, the higher use of first-person singular pronouns ("I") by Americans in the word-counting analyses was mirrored in the thematic analyses, which showed Americans' tendency to differentiate themselves from others and position themselves as the central actor in events. This also fits with the observation that Americans focus on successful individual outcomes—as evidenced by our topic modeling results. By contrast, Belgian participants more often spoke about accommodating others, consistent with their emphasis on collaborative processes and the work environment, as also reflected in the topic modeling results. Americans' greater use of insight-related words (e.g., "realize," "understand") can likewise be linked to their tendency to derive personal meaning from events and to highlight positive takeaways—observed in the thematic analyses.

In other cases, triangulation may help clarify findings that, taken alone, might appear to contradict prior work. For example, we observed that American participants used more negative affect words than Belgian participants, which appears to challenge earlier research suggesting that Americans tend to avoid negative affect, while Western Europeans show greater acceptance of it (e.g., Koopmann-Holm & Tsai, 2014). However, our thematic analyses offered an important qualification: Americans often highlighted the positive aspects of negative events, framing them in terms of personal growth, resilience, or silver linings. Thus, even when American participants attended to or expressed negative emotions, these expressions may have served a constructive function within a broader meaning-making process.

We also observed an unexpected pattern in social language use. In our word counting results, we noticed that Americans talked just as much about relationships as Belgians did, and even used more words for affiliation (e.g., "sharing," "meet," "group"). On its own, this pattern might appear to contradict claims that Americans, as members of a highly individualistic culture, pay less attention to interpersonal concerns (e.g., Heine et al., 1999; Tsai et al., 2004). However, our topic modeling results show that American references to relationships often arose in the

context of high-energy, celebratory events—such as parties—that typically involve many social others, whereas Belgian narratives more often described calmer situations. Moreover, our thematic analyses indicate that—even if Americans use more social words—their narratives remain more self-oriented, whereas Belgian narratives express greater consideration for others, egalitarian values, and social coordination. Finally, another possible explanation for Americans' higher use of affiliation-related words is that establishing and actively engaging in close relationships may be more important to Americans due to their high relational mobility (Kito et al., 2017), in line with the more individualistic view that relationships are voluntary and require active investment; in contrast, Belgians, who often maintain stable ties within the same social network of family and friends (Long, 1991), may view relationships as inherent and enduring. This last explanation is not directly suggested by our data and needs to be examined in future research.

Beyond consistencies and inconsistencies with the existing literature, the present findings bring novel insights into the models of emotion and the corresponding systems of values and practices that are active in these two cultural contexts. Namely, our topic modeling and thematic analysis results underscore the emotionally expressive demeanor of Americans and its contrast with the regulated mien of Belgians. Although this finding does align with previous evidence that Americans make more use of expressive behaviors such as smiles (e.g., Rychlowska et al., 2015), it contrasts with characterizations of contemporary US culture as emotionally 'cool' (e.g., Morin & Acerbi, 2017; Stearns, 1994). That Belgians would be more emotionally reserved can be interpreted in light of their focus on negotiation and tolerance (Sels et al., 2000; van de Craen, 2002); from this perspective, displays of both intense negative and positive emotions are to be avoided – even in a culture broadly considered individualistic. In a similar vein, we observed that Americans used more words related to reward, whereas Belgians used more words related to risk. These linguistic cues fit with our intuitions and experiences that Americans are attuned to positive outcomes, while Belgians are more keenly aware of threats to stability (e.g., more reward-related language might be associated with appraisals of goal-congruence, whereas more risk-related language might be associated with avoidance of conflictual encounters). As such, this finding points to cultural differences in the meaning of situations that give rise to emotions.

Constraints on Generality

In interpreting the present findings, we also note aspects of our methods that have bearing on the generalizability of our conclusions. One is the nature of our samples. The American and Belgian participants we interviewed were principally recruited as majority reference groups for newcomer immigrant minorities in the respective countries. For this reason, they were intentionally limited in their recent history of migration, with impacts for their diversity of racial, ethnic, and cultural background. Further, while Belgian participants were recruited via personal networks across Dutch-speaking Flanders, the sample did not include representatives of French-speaking Wallonia and Brussels or German-speaking East Belgium. Thus, our observations about 'Belgian' national culture, although they sync with prior findings about Western Europeans more generally (e.g., Koopmann-Holm & Tsai, 2014), are more precisely about Flemish culture. The same can be said of our observations about 'American' culture, given that US participants were all recruited and interviewed in California. Californians might in some ways epitomize American cultural ideals due to their history of voluntary settlement in the frontier west (Kitayama, Ishii, et al., 2006; Vandello & Cohen, 1999). More generally, the systems of meaning and values present in one region of the US do not necessarily extend to all others (Plaut et al., 2002). Cultures are

neither monolithic nor isomorphic with nation states; regardless of the geographic dispersion or number of people sampled, there will always be diversity left unaccounted for by group-level summaries. Cultures are also not static. Our hope is to have provided a snapshot of the emotion models practiced by these cultural groups at this point in historical time.

Another set of considerations to bear in mind while interpreting the present findings has to do with the analytical approaches we employed. For instance, our use of word counting tools to compare data across languages is an imprecise endeavor. Languages vary in what is possible or allowed in building words and sentences (i.e., their grammar). Although English and Dutch are very similar on a global scale (Majid et al., 2007; Majid, 2015), they are certainly not identical. These differences in possible use may have contributed to the differences we observed in the present study. Our observations may also have been influenced by the LIWC dictionaries that we used. Dutch LIWC2015 is an automated translation of the English version that has been systematically expanded and evaluated (Van Wissen & Boot, 2017). Our review of the resulting dictionaries found that they account for the most common forms of Flemish dialectical variation. At the same time, differences in dictionary contents likely persist; indeed, we found (and corrected for the fact) that the American data were better covered by English LIWC2015 than the Belgian data were by Dutch LIWC2015. This correction is a partial solution and LIWC dictionary differences may still have impacted our results. Additional robustness checks to evaluate the credibility of our cross-culture and -language comparisons revealed that some of our estimates of cultural variation may be generous (i.e., credible but inflated). For the other approaches, we note that topic modeling excluded function words and focused only on content words, which reduces the likelihood that structural differences between the languages could explain the findings. Similarly, the inductive thematic analyses moved beyond surface-level linguistic features to capture broader patterns of meaning in the narratives. As such, our results are unlikely to be fully explained by differences in language structure or the analytical tools used. Fully accounting for these differences, while preserving text data in their original languages, remains an open challenge for future research.

Relatedly, word counting provides a comprehensive but coarse overview of the linguistic resources used in a text. LIWC treats language like a bag of words, destroying sequential relationships between words. As a result, contextualized meanings are lost, such as whether a word was negated (“not happy”), part of a stock phrase (“happy birthday”) or used with a different sense (“happy accident”). These limitations of word-counting approaches are well-known and typically evaluated in light of two complementary considerations. First, despite the noise introduced by negations, phrases, etc., word counting captures overall trends in how language is used, and these trends have remarkable psychological utility. They correlate with constructs of interest (e.g., personality dimensions) and predict relevant outcomes (e.g., mental health symptoms; for a review, see Tausczik & Pennebaker, 2010). Second, the aspects of language use captured by word counting are not intended as a direct reflection of people’s experience: the use of the word “happy” does not entail that the speaker felt joyful, just as the use of the word “certain” does not entail that the speaker was confident. Instead, word counts index the extent to which someone is attending to ‘happiness,’ ‘certainty,’ etc. (Boyd & Schwartz, 2021). As such, negation (e.g., “not happy”), stock phrases (e.g., “happy birthday”), and more are just as representative of attention to (and evaluation of) the dimension in question (e.g., ‘happiness,’ ‘positive emotion,’ ‘emotion’).

While our word counting results do not allow insight into contextualized meanings or language-neutral patterns of use, one benefit is that they are fully automated and free from

researcher assumptions (at least our own; the words counted were determined by other researchers; for discussion, see H. A. Schwartz et al., 2013). This contrasts with topic modeling and thematic analyses which, although they extend the breadth and depth of our observations, require some subjective decisions. Topics, although data-driven, must be interpreted and labeled by the researcher. Thematic analysis is inductive and therefore fully qualitative (Braun & Clarke, 2021). Other research teams may have assigned different labels to the topics and highlighted different motifs in the interviews. To guard against one cultural perspective outweighing another, our broader research team includes native and naturalized Americans, native and naturalized Belgians, as well as members of other cultural groups. Multiple perspectives were always involved in the interpretation of data to balance the advantages and disadvantages that cultural insiders and outsiders can bring (Berger, 2015). Likewise, our simultaneous application of multiple analytical approaches also serves to balance the advantages and disadvantages of each.

Across our methods, one interpretive challenge concerns how we understand why people use certain linguistic features in their narratives. When interpreting differences in what people talk about across cultures, it is tempting to assume that more language about a given topic means that it is culturally valued. This assumption underlies many language-based analyses (e.g., Tsai et al., 2004). At the same time, we acknowledge that salience in language use can reflect multiple, sometimes competing, forces. A topic may occur frequently because it is important or normative, but salience might also signal values that are under threat (e.g., 'loneliness' as a pointer toward relational needs) or require active negotiation (e.g., feelings of stigmatization; De Choudhury et al., 2017). Differences in patterns of language use may also be related to cultural variation in the extent to which a shared context can be assumed (Hall, 1976), with some cultural groups able to convey implicit meanings due to stable social bonds joint experiences (i.e., high(er)-context cultures such as Belgium; e.g., Hornikx & Le Pair, 2017) and other cultural groups using explicit communication styles coordinate understandings (i.e., low-context cultures such as the US; e.g., Kim et al., 1998). These alternative interpretations do not undermine our conclusions but rather highlight the complexity of linking language use to cultural meaning. Throughout the paper, we triangulate our interpretations across multiple analyses (topic modeling, word counting, and thematic coding) and consider both content and style of expression. Nonetheless, we remain cautious in assigning univocal meaning to linguistic salience, and we discuss cases where divergent interpretations may be equally plausible—such as in the case of higher rates of affiliative language in the American versus Belgian narratives.

We also considered the possibility that the differences we found between American and Belgian narratives could be accounted for by culture-specific events that call for certain descriptions, or by culture-specific ways of responding to interview prompts. There are two observations that temper this possibility. First, the samples are demographically similar and were collected around the same time, making it less likely that content differences would be due to differences in age, level of education, etc. or in contemporary world events. Indeed, we found topics related to the COVID-19 pandemic in both samples (see Tables S3 and S4). Second, and more critically, an in-depth review of the raw narratives did not reveal any substantive differences in how participants engaged with the interview. To the extent that there are differences in the content of participants' responses, these are precisely our phenomena of interest: our interviews gave participants the option to describe the events of their choice, and their choices are informative. Still, this type of interview is but one way of gathering narrative data. Future work may follow up with more controlled means of assessing cross-cultural patterns of language use (e.g., by having participants react to a common stimulus; Pavlenko, 2002).

A final consideration concerns the specificity of our findings to emotional narratives. One might ask whether similar patterns would emerge in accounts of everyday situations that are less explicitly emotional. While this is an important question for generalizability, we view emotional narratives as uniquely revealing, as emotions are interwoven with meaning-making more broadly. In our view, there is no such thing as a purely "non-emotional" narrative: people's descriptions of experience—whether explicitly framed as emotional or not—reflect what they attend to, care about, and seek to convey. Emotions are deeply embedded in cultural systems of meaning: they signal values, guide attention, and make evaluations explicit (Frijda, 1986; Mesquita, 2010; Parkinson, 1996). In this sense, the cultural models of emotion we observe in this study not only illuminate emotional experience but also reflect broader interpretive frameworks through which people make sense of the social world. Future work might extend these methods to other types of narratives (e.g., for a comparison of managerial interviews from New Zealand and Belgium, see Ellis, 2012), but we expect that similar meaning structures would emerge.

Contributions and Conclusion

Zooming out from our specific findings and methodological considerations, we see several contributions that the present work makes to the study of emotion and culture. Foremost, the mixed-method approach we employed is unique in combining multiple ways of looking at language, and lines up with other recent initiatives that have paired qualitative with quantitative analyses in this domain (Doucerain et al., 2016; Ready et al., 2020; see also Bail, 2014; de la Harpe et al., 2024). Also unique is the fact that we maintained our data in the original languages, permitting us to make observations, especially in the thematic analysis, that better represented participants' intended meanings and the cultural contexts in which they were conveyed. As reviewed in the introduction, the languages (English, Dutch) and cultures (US, Belgian) in question share many similarities, providing a more exacting test of our ability to recover culture-specific models of emotion from conversations about everyday experiences. Nevertheless, all three analytical approaches yielded overlapping observations about the conceptualization of emotion in our samples.

By doing so, our findings move beyond reductionistic dichotomies and emphasize the variation that exists even among cultures that share many features. While both the United States and Belgium are typically classified as individualistic in cross-cultural frameworks (Hofstede, 1984; Markus & Kitayama, 1991; Triandis, 1995), our results illustrate how the form and expression of individualism can differ markedly across such contexts. US individualism in our sample was characterized by high-arousal expressiveness, personal achievement, and self-promotion, whereas Belgian individualism was marked by moderation, egalitarianism, and an emphasis on coordination within a network of equals. The present study is not the first to document such within-category differences. For example, Boiger et al. (2013) showed that anger and shame carry different cultural meanings and functions in the US and Belgium, reflecting the promotion of competitive individualism in the US and egalitarian individualism in Belgium. This variation underscores that "American" individualism is only one instantiation of a broader construct and should not be taken as its default or defining form. Indeed, recent contributions in cultural psychology have called for moving beyond oversimplified dichotomies such as East–West or individualism–collectivism (Kitayama & Salvador, 2024), and for systematically mapping cultural diversity both within and across world regions (e.g., Krys et al., 2024; Uskul et al., 2025). Expanding research to encompass this diversity will provide a more comprehensive

account of how cultural ideals, values, and communicative styles vary across contexts, and will help avoid conflating the US variant with individualism as an umbrella concept.

Given the considerations discussed above, our observations are not authoritative, but rather one possible set of lenses through which we can view Americans and Belgians, and their emotions. They spotlight what we can learn about emotion – and the cultural values and self-construals that give rise to it – by asking people to describe recent emotional events. In particular, this use of natural language expands upon what we can learn from the rating scales typically used to compare emotions across cultures (e.g., De Leersnyder et al., 2011; Kitayama, Mesquita, et al., 2006). In addition to which emotions were experienced, open descriptions give access to what people understand, believe, and value, and how they situate themselves in the social and physical world. As such, data and analyses such as the present can help us build a more complex and complete picture of emotional lives around the world, one piece at a time.

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Supplemental Material

Table S1. Situational Prompts from the Emotional Patterns Questionnaire (EPQ)

Valence	Social Engagement	Prompt
Positive (Pleasant)	Engaging (Relationship-Promoting)	"Recall a situation that made you feel good about your relationships with others. For example, you may have felt close, respectful, or friendly towards others."
Negative (Unpleasant)	Engaging	"Recall a situation that made you feel bad about something you did in a relationship with others. For example, you may have felt ashamed or guilty."
Positive	Disengaging (Autonomy-Promoting)	"Recall a situation that made you feel good about yourself. For example, you may have felt proud or better than others."
Negative	Disengaging	"Recall a situation that made you feel bad about something someone else did. For example, you may have felt angry or frustrated."

Interview Scheme
(If the participant has difficulty remembering the situation, the interviewer may rely on the notes taken during the questionnaire and briefly remind the participants of the situation. For example: "Earlier, you described the situation in the train station where you met your friend…")

Can you give a little more detail about what happened and how you felt?

I would like to ask you a few more questions about this situation. Is that alright with you?

(First) Questions about the situation:
• *(If this was an interaction)* Who were you interacting with?
• Where were you?
• When did this happen? What time of day was it?
• How important was this event to you?
• How good/bad was this event to you?

(Second) Questions about emotions
• What did you say or do, or what did you want to say or do?
• How did you feel?
• Did you notice any sensations in your body?
• Can you tell me why you feel or act this way? What can you say about the event that caused you to feel or behave this way?
• *(If this was an interaction)* What did the other person(s) say or do?
• *(If this was an interaction)* Did this change your initial feelings or actions?
• Were there other people around when this happened? Who were they and how did they react?

Topic Modeling Analyses

Table S2. Meaning Extraction Method (MEM) Details, per Situation Type

Situation Type	Sentences Submitted		Words Retained		Potential Elbows		KMO		Bartlett's Test of Sphericity		Variance Explained	
	Dutch	*English*	*Dutch*	*English*	*Dutch*	*English*	*Dutch*	*English*	*Dutch*	*English*	*Dutch*	*English*
Positive Engaging	2804	2086	155	187	8, 16	6, 12, 14	0.50	0.49	$\chi2(16,486) = 11,935$***	$\chi2(17,391) = 21,794$***	15%	13%
Negative Engaging	3140	2123	159	171	9, 11, 19	6, 10, 12	0.50	0.50	$\chi2(18,735) = 12,561$***	$\chi2(14,535) = 18,869$***	15%	14%
Positive Disengaging	2921	1881	152	187	8, 14	6, 12, 16	0.50	0.49	$\chi2(15,449) = 11,476$***	$\chi2(17,391) = 24,309$***	15%	14%
Negative Disengaging	3588	2042	150	176	9, 13	4, 8, 13	0.51	0.49	$\chi2(16,764) = 11,175$***	$\chi2(15,400) = 18,162$***	15%	14%

Note: ***p < .001

Table S3. Extracted Topics from Americans' Emotion Interviews, per Situation Type

Situation Type	No.	Description	Words (Loadings)
Positive Engaging	1	celebration	birthday (.67), party (.64), surprise (.45), happy (.34), excite (.25),
	2	staying in touch with family	pass (.53), mother (.52), touch (.44), stay (.42), family (.27), child (.25), sister (.23), young (.21)
	3	school	school (.52), high (.45), college (.40), friend (.35), year (.25), leave (.25), stay (.22)
	4	spending time together	time (.55), spend (.45), couple (.38), hour (.36), drive (.28), long (.27), together (.24)
	5	competition and finances	race (.49), guy (.47), lose (.39), money (.33), end (.32), past (.22), pay (.20)
	6	caring, appreciation, and support	show (.51), care (.45), gift (.25), express (.25), understand (.25), person (.25), respect (.23), cool (.22), appreciate (.21), support (.20), year (-.21)
	7	socializing and food	hang (.40), together (.40), food (32), night (.26), relax (.22), bring (.21), cook (.20), high (-.20), age (-.21), interest (-.22)
	8	listening to/playing music	music (.64), listen (.44), room (.36), play (.27), significant (.26), nervous (.24)
	9	social connection	connect (.37), social (.36), relationship (.33), strong (.32), close (.26), interaction (.24), normal (.21), positive (.20), reason (.20), laugh (-.22), remember (-.22), husband (-.23)
	10	stress and relaxation	stress (-.42), worry (-.36), day (-.34), relax (-.32), comfortable (-.30), present (-.27), mind (-.25), start (.21)
	11	past interpersonal issues	past (.33), issue (.31), gift (.22), problem (.22), interaction (.21), husband (.21), honest (.20), small (-.21), plan (-.22), class (-.23), talk (-.32)
	12	meetings and social interactions	meeting (.41), people (.35), share (.32), reach (.32), group (.25), friendly (.24), grow (.21), cool (.20)
	13	enjoyment child rearing	relax (.31), enjoy (.27), gift (.22), great (.21), learn (-.20), set (-.20), parent (-.20), child (-.20), understand (-.22), state (-.23), live (-.29)

	14	unresolved communication and emotional distress	answer (-.45), phone (-.39), call (-.32), question (-.27), wrong (-32), sit (-39), heart (-.45), place (.20)
	15	cognitive challenges and engagement	deep (-.47), game (-.45), play (-.40), hard (-.37), explain (-.36), brain (-.20), mind (-.20)
Positive Disengaging	1	family trip	trip (.84), road (.83), mom (.52)
	2	school	school (.57), high (.57), college (.40), past (.34), young (.29), year (.27), race (.26), kid (.24)
	3	phone communication	phone (.60), number (.56), call (.47), name (.35), easy (.27)
	4	emotional struggles and anxiety	fight (.54), positive (.47), anxiety (.41), emotion (.40), interaction (.37), worry (.29), lose (.21)
	5	family meals	food (.48), house (.42), eat (.37), kid (.37), dinner (.35), sit (.33), buy (.28), family (.25), woman (.22)
	6	sharing exciting moments with family	skate (.48), watch (.42), girl (.40), leave (.33), week (.30), excite (.28), sister (.25), hour (.24), sit (.22), parent (.21), response (.21)
	7	car and time management	guy (.48), tire (.40), spend (.40), car (39), race (.37), change (28), month (.24), time (.22), enjoy (.21)
	8	positive emotional reactions	reaction (.55), physical (.47), smile (.41), big (.33), hope (.32), thank (.31), remember (.21), deal (.20), sad (.20)
	9	accomplishment in school	grade (.45), assignment (.36), complete (.33), week (.30), easy (.29), stuff (.28), big (.20), class (.20), enjoy (-.20), people (-.23)
	10	time spent together (at work)	hour (.42), spend (.30), half (.30), time (.28), couple (.26), together (.26), game (.24), work (.24), minute (.22), company (.21), late (.21), year (.20)
	11	career and life goals	continue (.39), job (.29), life (.25), career (.23), goal (.22), future (.22), sad (.22), company (.22), work (.21), year (.20), issue (-.20), problem (-.21), young (-.23), walk (-.27)
	12	honesty and anxiety	honest (.41), anxious (.40), reason (.37), speak (.34), fact (.30), anxiety (.27), surprise (.27), nervous (.22), enjoy (.20)
	13	accomplishment and pride	accomplishment (.45), pride (.43), happiness (.41), sense (.40), win (.27), emotion (.25), relief (.21), anxious (21)
	14	personal relationships and covid	real (.37), event (.32), late (.30), month (.29), live (.27), relationship (.25), close (.24), covid (.20), daughter (.20), personal (.20), excite (-.22), game (-.30), play (-.30)
	15	online training	train (.46), break. (.44), small (.37), tire (.27), room (.26), group (.25), half (.24), change (.20)
Negative Engaging	1	school	school (.77), high (.76), year (.33)
	2	communication and apology	text (.58), send (.55), apologize (.38), message (.38), group (.33), mom (.27), sister (.27), spend (.20)
	3	emotional reactions	positive (.47), negative (.47), physical (.38), react (.35), reaction (.35), emotion (.28), guy (.23), response (.22), experience (.20)
	4	expressing emotions	word (.49), angry (.47), sad (.42), upset (.35), express (.31), communicate (.28), yell (.26), wrong (.25), cry (.22), frustrate (.22)

	5	friendships and emotional dynamics	friendship (.49), ruin (.37), relationship (.37), long (.34), interaction (.29), important (.25), emotion (.25), experience (.22), express (.21), affect (.20)
	6	time and social plans	hour (.31), late (.30), week (.30), day (,29), couple (.28), together (.24), visit (.24), night (.24), live (.22), state (.20), break. (.20), friend (.20), plan (.20)
	7	minimizing and apologies	big (.72), deal (.71) apologize (.26), fine (.22), affect (.20)
	8	family problems	mom (.52), sister (.47), dad (.34), son (.29), live (.23), daughter (.23), parent (.22), stress (.21), interaction (-.22)
	9	shame and guilt	guilt (-.46), shame (-.41), hurt (-.35), embarrass (-.34), ashamed (-.25), emotion (-.22), guilty (-.21), stomach (-.20)
	10	driving and anger	drive (.59), car (.57), leave (.29), mad (.28), reaction (.28), house (.25), physical (.20)
	11	hanging out with friends	close (-.36), group (-.29), friend (-.28), mention (-.25), person (-.21), hang (-.20), time (.26), spend (.20)
	12	financial concerns and work	money (-.50), pay (-.48), worry (-.28), work (-.26), job (-.23), friend (.20)
	13	phone calls and forgetfulness	call (.59), complete (.40), name (.39), son (.31), phone (.30), remember (.28)
	14	navigating social issues	support (.27), people (.25), wrong (.23), mess (.22), continue (.22), interest (.21), remember (-.20)
	15	understanding and responding to experiences	stay (-.35), explain (-.30), understand (-.28), listen (-.24), experience (-.21), month (.23), physical (.31), reaction (.35)
Negative Disengaging	1	big deal	big (.71), deal (.70), long (.31), place (.20)
	2	emotions and behavioral responses	negative (.60), positive (.58), emotion (.40), behavior (.29), term (.28), sense (.21), event (.20)
	3	waiting and staying calm	wait (.37), minute (.37), face (.35), hand (.35), calm (.29), throw (.28), pick (.22), break. (.21), close (-.21), work (-.22), friend (-.23)
	4	communication with friends and family	text (.49), send (.48), girlfriend (.42), call (.29), sister (.27), day (.25), rest (.23), annoy (.22), respond (.20), group (.20)
	5	time	couple (.52), week (.45), late (.35), hour (.34), month (.28), day (.27), family (-.23)
	6	domestic/neighborhood incidents	park (.54), fight (.35), house (.32), close (24), stop (.21), car (.20)
	7	honesty and annoyance	honest (.42), express (.40), bother (.32), issue (.30), close (.27), people (.26), fact (.24), homework (-.20), study (-.20)
	8	family communication and understanding	call (.34), dad (.31), explain (.30), talk (.28), idea (.28), brother (.26), phone (.24), understand (.22), figure (.22), wrong (.21), husband (.20), speak (.20)
	9	academic challenges and emotional responses	respect (-.39), show (-.38), frustrate (-.28), angry (-.21), pull (.23), question (.25), study (.29)
	10	observing and participating in social dynamics	watch (-.46), listen (-.38), case (-.26), side (-.25), room (-.22), pick (-.22), stuff (-.21), fight (-.21), interaction (-.20), read (-.20)
	11	frustration with schoolwork	anger (.46), frustration (.39), homework (.30), issue (.28), stuff (.26), term (.24), hour (.23), trust (.20), month (-.20)

	12	daily routines and problems	room (-.36), eat (-.34), sleep (-.32), mind (-.28), problem (-.24), bed (-.22), time (-.22), concern (.20)
	13	verbal aggression and family	start (.38), yell (.32), phone (.29), guy (.23), kid (-.21), mom (-.21), life (-.21), concern (-.22), dad (-.23), live (-.25)
	14	decisions and actions	leave (.42), decide (.37), time (.34), stay (.30), follow (.28), idea (.25), speak (.21), control (.21), action (.21)
	15	emotional dynamics and interpersonal interactions	fine (.33), conversation (.32), change (.31), irritate (.27), happy (.23), minute (.22), homework (-.20), head (-.25)

Table S4. Extracted Topics from Belgians' Emotion Interviews, per Situation Type

Situation Type	No.	Description	Words (Loadings)
Positive Engaging	1	work and sickness	ziek [sick] (.51), werken [work] (.50), baas [boss] (.41), maand [month] (.35), thuis [home] (.31), week [week] (.26), vallen [fall] (.24), direct [direct] (.23), collegas [colleagues] (.20)
	2	(learning/making effort in) relationships	kennen [know] (.67), leren [learn] (.56), lang [long] (.33), elkaar [each other] (.27), moeite [effort] (.24), fijn [fine] (.23), mekaar [each other] (.22), jaar [year] (.20)
	3	communication and kindness	bericht [message] (.72), sturen [send] (.70), wandelen [walk] (.27), bedanken [thank] (.26), hopen [hope] (.25)
	4	social gatherings and positivity	plaats_vinden [take place] (.53), leuk [nice] (.40), fijn [fine] (.34), moeite [effort] (.24), tof [cool] (.24), nood [need] (.21), aangenaam [pleasant] (.21), brengen [bring] (.21), lopen [walk] (-.20)
	5	planning, success and gratitude	plan [plan] (.68), trekken [pull] (.65), wachten [wait] (.22), dankbaar [grateful] (.20), man [man] (-.22)
	6	family and daily life	gezin [family] (.47), kind [child] (.47), koppel [couple] (.40), oud [old] (.37), vrouw [woman] (.32), zoon [son] (.25), druk [busy] (.21), huis [house] (.20), helpen [help] (-.23)
	7	daily relationships and health	uur [hour] (-.35), avond [evening] (-.27), laat [late] (-.27), week [week] (-.27), ziekenhuis [hospital] (-.27), liggen [lie] (-.25), thuis [home] (-.21), familie [family] (.20), horen [hear] (.28), collegas [colleagues] (.37)
	8	friends and family time	vriend [friend] (.45), eten [eat] (.44), zus [sister] (.36), vriendin [girlfriend] (.35), familie [family] (.30), avond [evening] (.21), mens [person] (-.21)
	9	work life vs. private life	druk [busy] (.41), dag [day] (.29), werk [work] (.28), job [job] (.28), blijven [stay] (.21), moeder [mother] (-.21), vertellen [tell] (-.23), vrouw [woman] (-.26), durven [dare] (-.29)
	10	driving	rijden [drive] (.58), auto [car] (.57), wonen [live] (.37), jong [young] (.29), oud [old] (.22)
	11	social needs during pandemic	contact [contact] (.59), sociaal [social] (.53), nood [need] (.36), moeder [mother] (.20), brengen [bring] (-.20)
	12	school life	les [lesson] (.45), klas [class] (.44), merken [notice] (.34), lief [sweet] (.32), volgen [follow] (.26), band [bond] (.25), hopen [hope] (.20)

	13	health and care	gevoelen [feelings] (-.42), reactie [reaction] (-.28), positief [positive] (-.25), veranderen [change] (-.22), praten [talk] (-.20), ziekenhuis [hospital] (.20), brengen [bring] (.23), iedereen [everyone] (.23), zorgen [care] (.26)
	14	conversation	vertellen [tell] (.35), verhaal [story] (.34), aangenaam [pleasant] (.25), luisteren [listen] (.24), sommig [some] (.24), babbelen [chat] (.21), feit [fact] (.20), man [man] (-.23), hulp [help] (-.24)
	15	emotions and relationships	gevoel [feeling] (.34), mekaar [each other] (.31), warm [warm] (.29), tijd [time] (.23), wandeling [walk] (.22), vertrouwen [trust] (.20)
Positive Disengaging	1	family	zus [sister] (.49), vriendin [girlfriend] (.41), mama [mom] (.41), ouder [parent] (.37), terug_bellen [call back] (.29), man [man] (.26), vrouw [woman] (.26), thuis [home] (.25), dochter [daughter] (.23), direct [direct] (.20)
	2	positive emotions	voorstellen [propose] (.48), tevreden [satisfied] (.45), zon [sun] (.37), blijdschap [joy] (.36), lichaam [body] (.34), gevoelen [feelings] (.26), blij [happy] (.25), vallen [fall] (.23), speciaal [special] (.21)
	3	working hard	werken [work] (.46), hard [hard] (.39), door_werken [continue working] (.27), jaar [year] (.26), eind [end] (.25), bedrijf [company] (.22), project [project] (.22), werk [work] (.21), antwoord [answer] (-.20), vraag [question] (-.24)
	4	work life and teamwork	team [team] (.44), baas [boss] (.36), groep [group] (.34), elkaar [each other] (.31), bedrijf [company] (.30), zitten [sit] (.28), door_werken [continue working] (.27), klein [small] (.22), man [man] (.22), mooi [beautiful] (.22)
	5	school and opportunities	school [school] (.48), starten [start] (.40), kans [chance] (.37), groot [big] (.33), nieuw [new] (.28), brengen [bring] (.20)
	6	studying and daily life	avond [evening] (.40), lang [long] (.34), zetten [put] (.33), wonen [live] (.31), studeren [study] (.27), week [week] (.26), af_studeren [graduate] (.25), zitten [sit] (.23), thuis [home] (.22), werken [work] (.22)
	7	school and difficulties	leerling [student] (.50), jaar [year] (.42), leerkracht [teacher] (.40), moeilijk [difficult] (.32), meisje [girl] (.26), school [school] (.22)
	8	relationships and communication	vriend [friend] (.54), familie [family] (.50), persoon [person] (.28), contact [contact] (.26), leven [life] (.25), praten [talk] (.22)
	9	home and family life during pandemic	huis [house] (.42), wandelen [walk] (.38), thuis [home] (.32), kind [child] (.28), dochter [daughter] (.26), liggen [lie] (.23), corona [corona] (.23), gezin [family] (.21), uur [hour] (.20)
	10	appreciating special occasions	plaats_vinden [take place] (.55), fijn [fine] (.51), plezant [pleasant] (.26), belangrijk [important] (.22), samen [together] (.22), speciaal [special] (.21), dag [day] (.20)
	11	communication and problem solving	sturen [send] (.59), mail [email] (.50), laat [late] (.30), op_lossen [solve] (.26), antwoord [answer] (.22), vraag [question] (.22), uur [hour] (.21)
	12	personal and professional connections	persoonlijk [personal] (.39), zaak [business] (.30), samen [together] (.30), sommig [some] (.29), collegas [colleagues] (.29), laat [late] (.23), lockdown [lockdown] (.20), terug_bellen [call back] (-.20), direct [direct] (-.26)

	13	communication	beginnen [begin] (.45), vertellen [tell] (.32), lachen [laugh] (.29), stoppen [stop] (.28), iedereen [everyone] (.27), week [week] (.25), reageren [react] (.20), wachten [wait] (.20)
	14	energy and daily activities	energie [energy] (.41), leuk [nice] (.35), dag [day] (.31), volgen [follow] (.29), fysiek [physical] (.25), horen [hear] (.23), nieuw [new] (.21), tijd [time] (.20)
	15	conversations and interactions	mekaar [each other] (-.39), mens [person] (-.26), kennen [know] (-.25), praten [talk] (-.25), vrouw [woman] (.21), gesprek [conversation] (.26)
Negative Engaging	1	communication by phone	sturen [send] (.77), bericht [message] (.63), mail [email] (.50), klas [class] (.29), op_bellen [call] (.22)
	2	working from home	thuis [home] (.35), werken [work] (.29), werk [work] (.29), week [week] (.26), zitten [sit] (.24), kind [child] (.23), tijd [time] (.21), periode [period] (.21), kwaad [angry] (-.20), vallen [fall] (-.22), fout [mistake] (-.23), fijn [fine] (-.23), plaats_vinden [take place] (-.27)
	3	family life	zus [sister] (.57), broer [brother] (.54), ouder [parent] (.41), slapen [sleep] (.29), wonen [live] (.27), thuis [home] (.24), moeder [mother] (.21), hand [hand] (.20), mama [mom] (.20)
	4	discussion among friends	groep [group] (.45), discussie [discussion] (.37), trekken [pull] (.35), rest [rest] (.34), duidelijk [clear] (.27), nodig [necessary] (.27), opmerking [remark] (.26), boos [angry] (.26), samen [together] (.25), zetten [put] (.23), vriendin [girlfriend] (.22), verwachten [expect] (.21), spreken [speak] (.21)
	5	appointments and setbacks	afspraak [appointment] (.53), uur [hour] (.47), open [open] (.41), staan [stand] (.29), lastig [difficult] (.25), wachten [wait] (.23)
	6	emotional reactions	reageren [react] (.38), positief [positive] (.34), reactie [reaction] (.32), boos [angry] (.20), zon [sun] (.20), samen [together] (-.25), wonen [live] (-.31)
	7	regulating negative emotions	blijven [stay] (.45), rustig [calm] (.43), vertrekken [leave] (.35), frustreren [frustrate] (.25), reageren [react] (.25), eten [eat] (.20), uur [hour] (.20), probleem [problem] (-.20), schuld [guilt] (-.20)
	8	authority figure and communication	groot [big] (.63), baas [boss] (.60), lopen [walk] (.39), woord [word] (.26)
	9	conversation and interactions	meisje [girl] (.55), maat [mate] (.50), bepalen [determine] (.32), gesprek [conversation] (.30), kennen [know] (.27), verhaal [story] (.27), vertellen [tell] (.22), contact [contact] (.20)
	10	problem solving and time management	avond [evening] (.41), morgen [morning] (.36), dag [day] (.33), lukken [succeed] (.29), direct [direct] (.23), probleem [problem] (.21), op_lossen [solve] (.21), uur [hour] (.20)
	11	time	maand [month] (.43), jaar [year] (.37), laat [late] (.33), oud [old] (.28), week [week] (.26), volgen [follow] (.21), relatie [relationship] (.21), kind [child] (.20), fysiek [physical] (-.23)
	12	covid measures at school and home	maatregel [measure] (.42), familie [family] (.38), afstand [distance] (.34), contact [contact] (.26), les [lesson] (.25), trekken [pull] (.22), corona [corona] (.21), belangrijk [important] (.20), horen [hear] (-.20), mama [mom] (-.23), wonen [live] (-.24)
	13	interactions at work	klant [customer] (.48), collega [colleague] (.39), specifiek [specific] (.34), vraag [question] (.33), vertrekken [leave] (.29), helpen [help] (.28), nieuw [new] (.25), merken [notice] (.20)

	14	feelings and understanding	kwetsen [hurt] (.60), gevoelen [feelings] (.47), persoon [person] (.43), hard [hard] (.29), veranderen [change] (.27), rest [rest] (.26), spelen [play] (.22), beseffen [realize] (.22)
	15	ease and continuity of relations	gemakkelijk [easy] (.40), lang [long] (.38), brengen [bring] (.29), nieuw [new] (.26), kennen [know] (.26), vriend [friend] (.26), elkaar [each other] (.23), klant [customer] (.22), periode [period] (.22)
Negative Disengaging	1	phone calls and immediacy	terug_bellen [call back] (.54), direct [direct] (.46), papa [dad] (.38), lang [long] (.31), pakken [grab] (.29), school [school] (.25), horen [hear] (.23), bellen [call] (.23), luisteren [listen] (.23), winkel [shop] (.22), uur [hour] (.21)
	2	driving	rijden [drive] (.78), auto [car] (.78), vader [father] (.21)
	3	online communication	sturen [send], (.69) mail [email] (.59), bericht [message] (.49), ouder [parent] (.30), vriendin [girlfriend] (.28)
	4	living arrangements and family	wonen [live] (.67), samen [together] (.42), nieuw [new] (.34), jaar [year] (.31), papa [dad] (.30), ouder [parent] (.28), mama [mom] (.24)
	5	daily routine and covid measures	week [week] (.44), laat [late] (.42), thuis [home] (.34), uur [hour] (.33), maand [month] (.30), zitten [sit] (.26), werken [work] (.22), mondmasker [face mask] (-.21), zetten [put] (-.25)
	6	family and worrying	moeder [mother] (.56), vader [father] (.47), zorgen [care] (.31), mama [mom] (.28), kind [child] (.25), familie [family] (.23)
	7	dinner-time problems	eten [eat] (.36), bellen [call] (.35), avond [evening] (.31), uur [hour] (.29), tijd [time] (.27), tafel [table] (.26), boos [angry] (.23), pakken [grab] (.22), leren [learn] (-.20), collega [colleague] (-.22), kennen [know] (-.29)
	8	arguments	discussie [discussion] (.40), frustratie [frustration] (.38), punt [point] (.32), bedoelen [mean] (.32), woord [word] (.32), reageren [react] (.29), hard [hard] (.22), tafel [table] (.20)
	9	social interactions during pandemic	elkaar [each other] (.46), groep [group] (.31), praten [talk] (.31), mens [person] (.22), mondmasker [face mask] (.21), iedereen [everyone] (.21), zitten [sit] (.20), uur [hour] (-.20), gesprek [conversation] (-.20), kloppen [knock] (-.21)
	10	negative emotions	kwaad [angry] (-.43), teleur_stellen [disappoint] (-.40), leven [life] (-.24), reden [reason] (-.23), frustreren [frustrate] (-.21), boos [angry] (-.20)
	11	decisions and reactions	zon [sun] (.33), reactie [reaction] (.33), snappen [understand] (.32), hard [hard] (.28), keuze [choice] (.23), bepalen [determine] (.22), werken [work] (.21), staan [stand] (-.23)
	12	frustration in interactions	communiceren [communicate] (.52), frustreren [frustrate] (.29), mens [person] (.27), mekaar [each other] (.26), duidelijk [clear] (.25), hand [hand] (.25), ouder [parent] (.21), blijven [stay] (.21), groep [group] (.21)
	13	size	groot [big] (-.46), fysiek [physical] (-.41), klein [small] (-.30), stoppen [stop] (-.20)
	14	challenges and solutions in interpersonal contexts	probleem [problem] (.39), op_lossen [solve] (.33), blijven [stay] (.24), kennen [know] (-.24), leren [learn] (-.25), vrouw [woman] (-.29), man [man] (-.30)
	15	negative feelings and experiences	gevoel [feeling] (-.37), negatief [negative] (-.26), gevoelen [feelings] (-.23), ambetant [annoying] (-.22), hard [hard] (-.22), kind [child] (.20), halen [get] (.25), leven [life] (.25)

Word Counting Analyses

Table S5. LIWC Comparisons Between Belgian and American Interviews

Category	**Effect Size (*d*)**			**Direction**	**Evaluation**
	Between Culture	*Within Language*	*Within Culture*		
function	6.16	0.15	6.49	BE	suspect
pronoun	1.27	-0.26	2.24	BE	suspect
ppron	-1.61	-1.46	-0.42	US	inflated
i	-1.29	-1.34	0.11	US	credible
we	-0.25	-0.23	-0.20	US	underpowered
you	0.32	0.32	0.00	BE	underpowered
shehe	-0.38	-0.52	0.29	US	underpowered
they	0.19	-0.32	0.53	BE	underpowered
ipron	0.92	1.51	-0.23	BE	credible
article	1.85	0.76	1.74	BE	suspect
prep	-0.27	-1.41	1.89	US	underpowered
auxverb	-2.12	-0.31	-2.17	US	suspect
adverb	5.31	0.47	5.23	BE	suspect
conj	4.02	1.08	3.20	BE	suspect
negate	-0.32	0.30	-0.91	US	underpowered
verb	-2.16	-1.60	-0.69	US	inflated
adj	5.51	-0.75	5.66	BE	suspect
compare	0.35	-1.38	3.06	BE	underpowered
interrog	0.48	0.01	0.50	BE	suspect
number	0.11	0.20	-0.10	BE	underpowered
quant	0.44	-0.22	0.64	BE	suspect
affect	-1.85	-0.90	-2.11	US	inflated
posemo	-1.53	-0.76	-1.42	US	inflated
negemo	-1.27	-0.45	-1.49	US	inflated
anx	-0.85	-0.92	0.12	US	credible
anger	-0.64	-0.47	-0.23	US	inflated
sad	-0.25	-0.07	-0.28	US	underpowered
social	-0.80	-0.03	-1.24	US	suspect
family	0.06	-0.03	0.24	BE	underpowered
friend	-0.08	0.13	-0.56	US	underpowered
female	0.03	-0.31	0.96	BE	underpowered
male	0.27	-0.22	0.98	BE	underpowered
cogproc	1.28	-0.68	3.12	BE	suspect
insight	-0.57	-1.21	1.38	US	credible
cause	1.78	0.20	2.12	BE	suspect
discrep	1.21	-0.09	1.80	BE	suspect
tentat	-1.37	-0.91	-0.71	US	inflated
certain	1.15	0.54	0.64	BE	inflated
differ	1.89	0.93	1.43	BE	inflated
percept	-0.62	0.06	-1.41	US	suspect
see	0.07	0.28	-0.41	BE	underpowered
hear	0.59	0.96	-0.67	BE	credible
feel	-1.21	-0.79	-1.04	US	inflated
bio	-1.04	-0.43	-1.18	US	inflated

body	-0.61	-0.08	-0.96	US	suspect
health	-0.76	-0.36	-0.49	US	inflated
sexual	-0.22	-0.05	-0.20	US	underpowered
ingest	-0.54	-0.29	-0.80	US	inflated
drives	-1.59	-0.83	-1.42	US	inflated
affiliation	-0.67	-0.40	-0.71	US	inflated
achieve	0.37	-0.31	0.95	BE	underpowered
power	-0.31	-0.80	0.51	US	underpowered
reward	-1.87	-1.27	-0.95	US	inflated
risk	0.41	0.73	-0.62	BE	credible
focuspast	0.01	-0.73	1.59	BE	underpowered
focuspresent	1.38	0.09	1.91	BE	inflated
focusfuture	4.17	1.19	3.66	BE	inflated
relativ	1.25	0.81	0.90	BE	inflated
motion	-0.13	0.12	-0.42	US	underpowered
space	-0.22	-0.33	0.21	US	underpowered
time	2.57	1.65	1.75	BE	inflated
work	-0.42	0.42	-1.36	US	suspect
leisure	-0.69	-0.20	-0.74	US	inflated
home	-0.33	0.03	-0.85	US	underpowered
money	0.19	-0.29	0.69	BE	underpowered
relig	-0.48	-0.41	-0.16	US	inflated
death	-0.01	-0.19	0.17	US	underpowered
informal	4.44	2.04	3.39	BE	inflated
swear	-0.52	-0.46	-0.11	US	inflated
netspeak	2.85	0.80	2.16	BE	inflated
assent	2.32	2.15	0.97	BE	inflated
nonflu	-0.88	0.51	-1.39	US	suspect
filler	5.02	0.72	3.55	BE	inflated

Note: Between-culture = Belgian Dutch vs. US English; within-language = Belgian English (translated) vs. US English; within-culture = Belgian Dutch (original) vs. Belgian English (translated).