

## Objective measurement of Spanish emotion vocabulary

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Current research on emotion knowledge and competence emphasises the role of language. Emotion vocabulary is one of the indicators of emotion knowledge that can be objectively measured; however, the metric properties of the scores obtained in tests and tasks to measure it have seldom been adequate. In this study we designed and validated a Spanish emotion vocabulary test (MOVE) employing a corpus approach to construct cloze multiple-choice items, administered the test to a Spanish-speaking sample from two countries, Spain and Argentina, and analysed structural validity of the test items with the Rasch model measurement approach. Eighty-eight items showed adequate fit. Overall, a substantial percentage of variance was explained by a latent variable. Reliability indexes at the test, item, and person level were also adequate. As a vocabulary test, the MOVE can be used in psychological and neurological investigation, as well as in language learning research.

**Keywords:** Emotion labels; Emotion vocabulary; Measurement; Rasch model.

The goal of this study was the construction and initial validation of a test of emotion label knowledge using an invariant measurement approach. That emotional state can be easily inferred from facial expressions is still a *common view* that influences educational and marketing practices, permeating both social life and research in fields such as artificial intelligence and neuroscience. However, current scientific evidence does not back that view (Barrett et al., 2019; Durán & Fernández-Dols, 2021). A different standpoint emphasises the role of language; for instance, emotion terms have been found to affect perceptual judgements of emotional stimuli, as well as perceptual memory of emotional facial expressions (Doyle & Lindquist, 2018; Fugate et al., 2018).

Theories of constructed emotion (Barrett, 2017; Brooks et al., 2017; Siegel et al., 2018) give language an outstanding role in human emotion science by postulating that changes in the natural world become mental states when they are categorised using prior conceptual knowledge. Emotion *labels* facilitate the learning of emotion concepts in children (Ogren & Sandhofer, 2022). Deficits in emotion recognition have been documented in semantic dementia patients (Lindquist et al., 2014); recent research on the semantic variant of primary progressive aphasia suggests that semantic knowledge guides not

only emotion recognition but also valence processing (Bertoux et al., 2020). Thus, current evidence allows us to consider the language of emotions not only as a means that people use to communicate affective experiences, but also to explain, control and inhibit their own states and those of others (Torre & Lieberman, 2018; Wood et al., 2016).

Given that words may help construct experience, it has been suggested that positive emotion vocabularies might be an especially fruitful target for applied research (Vine et al., 2020). For instance, it has been found that a better ability to differentiate positive emotions predicts a stronger relation between positive affect and daily optimism (Yang, 2022). In a similar vein, diversity of emotion vocabulary referred to negative emotions, expressed in stream-of-consciousness essays and public blogs, was associated with greater depression, neuroticism, and poorer physical health (Vine et al., 2020). Moreover, even basic emotion theorists are now working on a taxonomy of emotion labels (Keltner, 2019).

Emotion vocabulary is one of the indicators of emotion knowledge that can be objectively measured; some emotion knowledge tests have already been initially validated for Spanish-speaking populations, but with a limited set of emotion words (Delgado et al., 2017, 2018). Previous research in adolescents and adults has

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indexed emotion vocabulary with a definitions task, in which the participant has to define a target emotion word (Nook et al., 2017), with no psychometric properties reported except the number of participants who failed a particular item; or brief scenarios where the participant has to choose the most adequate emotional word (Austin, 2010), with low reliability. Another strategy has been to code emotion words in natural text, such as 'stream-of-consciousness' essays, and public blogs (Vine et al., 2020); however, reliability assessed by test–retest, correlations between positive and negative words, or split-half when dividing the text in two parts, was low.

Although psychological research on emotional knowledge and competence has increased in recent years (e.g., Kotsou et al., 2019), the metric properties of the scores obtained in the tests and tasks are not always adequate (Gignac, 2009). Employing questionable measures in a study affects the size of the correlation between emotion vocabulary and other variables. Constructing an emotion vocabulary ability test requires a *content validation* strategy that considers lexical and cultural variations within a particular language, and a *structural validation* strategy that can produce invariant measures (Engelhard, 2013). A test thus constructed could be used in psychological and neurological research, as well as in language learning research, since it is also a measure of vocabulary knowledge.

Item design with both sufficient difficulty and cross-cultural intersubjective adequacy requires a systematic approach to linguistic and cultural issues. Spanish is the second native language in the world by number of speakers, and is the official language in 21 countries, spanning a wide regional variation. Considering that word frequency is one of the main factors for item difficulty when measuring vocabulary knowledge (e.g., Vonk et al., 2019), and that there is variation across cultures on how salient the emotion lexicon is in the vocabulary (Delgado, 2009), a corpus approach can help to select emotional words with similar frequency of use in diverse Spanish-speaking areas. For instance, Delgado et al. (2020) found similar frequency of use of 100 emotion labels in the eight main Spanish-speaking areas: Spain, Mexico-Central America, River Plate, Continental Caribbean, Andean, Antilles, Chilean and USA. This result provides evidence for an initial selection of emotional terms.

As to invariant measurement, although Classical Test Theory (CTT) has been the main approach in test design and validation, its limitations have given rise to alternative models, such as the Rasch Model (RM), which allows the conjoint measurement of persons and items on the same dimension, and results in an interval scale. This is advantageous for both individual diagnosis and collective assessment (Delgado et al., 2017, 2018; Engelhard, 2013).

The five requirements of invariant measurement are the following: (a) The measurement of people is independent

of the particular items; (b) a more able person has a higher probability of passing an item than a less able person: people's response functions do not intersect with each other; (c) the calibration of the items is independent of the particular sample; (d) any person has a higher probability of passing an easy item than a more difficult one: the response functions of the items do not intersect; and (e) both items and persons can be located on the same latent variable (Engelhard, 2013).

Requirements (a) and (c) correspond to *specific objectivity* and are a formal property of the RM. This is the reason why the RM provides scores that maintain their meaning across different contexts when there is adequate data-model fit. Several fit statistics based on residuals are used in the Rasch measurement approach; these residual-based indices can be summarised for both items and participants, so that it can be examined whether the fit between the data and the model is good enough.

In synthesis, the objective of the present study was to design and provide initial validation for an emotion vocabulary test in Spanish, the MOVE (from the Spanish acronym: Medición Objetiva del Vocabulario Emocional, [Objective Measurement of Emotion Vocabulary]). From an initial selection of terms following a corpus approach, and expert judgement, we constructed a set of 90 items that was administered to a Spanish-speaking sample from two countries, Spain and Argentina, and analysed with the Rasch Model (RM), an invariant measurement approach.

## PARTICIPANTS

Two hundred and twenty-three Psychology students, ranging from 18 to 30 years of age ( $M = 21.2$  years,  $SD = 2.49$ ), were individually tested. Of them, 109 were Argentinian (55 females) and 114 Spanish (64 females). Participation was voluntary and data were anonymised.

## INSTRUMENTS

The MOVE test consists of 90 items of the *multiple-choice cloze* type: sentences with an empty space where the task is to select the best of the options offered. To measure vocabulary knowledge, the multiple-choice cloze item format is widely used because responses can be scored reliably and quickly by hand, or immediately if the assessment is computerised, as in this case. The main burden with multiple-choice questions is the time and effort required to prepare quality items in advance (Rose, 2020).

The MOVE test was constructed as follows: taking as a starting point a list of 270 emotion nouns that included the cross-culturally tested 100 labels from Delgado et al. (2020), 90 cloze multiple-choice items with three response options (Delgado & Prieto, 1998) were written so that there were no repeated choices (which could lead to dependencies between answers). The 90

items were written as simple sentences with an empty space, and the task was to choose the most appropriate option, considering the habitual usage in the context of the sentence. Because of their known frequency, 90 of the 100 labels were used to construct the correct answer. The remaining 10 (joy, confidence, satisfaction, desire, happiness, interest, fear, sorrow, respect, and surprise, which were very frequent and would therefore result in very easy items if used as correct responses) became part of the set of 180 distractors. The remaining 170 distractors were synonyms, antonyms, and terms from the same semantic fields as the 100 labels tested cross-culturally, so that there were no repeated choices. For each item, the three response options were arranged alphabetically.

As far as possible, impersonal constructions were employed for the item stems, reflecting common uses both in Spain and Argentina. When possible, statements referred to one grammatical gender to the exclusion of the other were avoided. Along these lines to arrive at the final statements, four of the authors, two from each target country, drafted and revised the items iteratively.

On the first screen of the test, the task was described. Identification number, gender, age, education, response option and right/wrong answers were automatically stored by the application. The 90 items were presented in a randomised sequence that was consistent for all participants (*entry* order). The data file that is recorded for analysis follows the sequence we have called *alphabetical*, in which the ordering is made considering only the first letter of the correct response. This was done because several sequences of random applications can be programmed in the future, if desired, but the data file and results will always follow alphabetical order (for ease of comparison). Appendix A shows both sequences and the correct responses. The 90 items can be found in Appendix B.

The MOVE test was computerised with LiveCode 4.6 (2011). There is no time limit, but the test is usually completed in about 10 minutes. Feedback on the number of correct answers is provided in the last screen (possible range: 0–90).

## DATA ANALYSIS

As already stated, the RM is an invariant measurement model that can be used for *structural validation* of the scores of an ability test (Engelhard, 2013). The RM formulation is the following:

$$\ln (P_{is} / (1 - P_{is})) = B_s - D_i \quad (1)$$

$P_{is}$  is the probability  $P$  of a correct answer to item  $i$  by subject  $s$ ;  $B_s$  is the level in the attribute of person  $s$ ; and  $D_i$  is the level in the attribute of item  $i$ .

In this model, the total scores are sufficient statistics; thus, the comparison between two items does not depend on the persons tested, that is, the distribution is irrelevant

if fit is good enough. The estimated differences in difficulty between two items do not depend on the abilities in the calibration sample.

Responses to the MOVE were analysed with the RM software Winsteps 4.7.0 (Linacre, 2021). Data-model fit was evaluated by *outfit* (sum of the standardised square of residuals after fitting the model over items or subjects) and *infit* (an information-weighted form of *outfit*). Following Linacre (2022) criteria, *infit* /*outfit* values over 2 distort the measurement system. Unidimensionality is a requirement for the model and so Rasch measures should account for at least 20% of the total variance. Principal component analysis of residuals was also performed; it is recommended that the unexplained variance in the first contrast be lower than 3.

Winsteps 4.7.0 (Linacre, 2021) reports various reliability statistics, such as Item Separation Reliability (*ISR*) and Person Separation Reliability (*PSR*). *ISR* and *PSR* should be over 0.70 for an adequate measure. Cronbach alpha, the classical indicator, is also provided.

The DIF hypothesis was also tested. Differential item functioning (DIF) analysis tests the generalised validity of the measures for different groups. There is DIF if people with the same level in emotion vocabulary who belong to different groups (female/male, Argentina/Spain) do not have the same probability of answering an item correctly. DIF is corroborated when the difference between item difficulty for each group is over 10.64 logits and statistically significant, considering *Welch t-test* and Bonferroni-corrected *alpha* levels (Linacre, 2021). *Welch t-test* was likewise used to evaluate between-group differences (impact). The data file can be found as Data S1.

## RESULTS

Table 1 shows the main results of the item analysis. Only two items (v20 and v21) got extreme scores and so their Rasch measures were not estimated. The Rasch analysis indicated adequate data-model fit for the remaining 88 items: mean *infit* was 0.99 ( $SD = 0.09$ ) and mean *outfit* was 0.88 ( $SD = 0.33$ ). For the 223 persons, mean *infit* was 0.99 ( $SD = 0.17$ ) and mean *outfit* was 0.88 ( $SD = 0.54$ ). Only one item (v30) showed *outfit* over 2. Only six persons (3%) showed *outfit* over 2. The percentage of variance explained by MOVE Rasch measures was 24.4% and the principal component analysis of residuals showed that the unexplained variance in the first contrast was 3.38 which is slightly over the recommended value. As to reliability, the classical internal consistency indicator, Cronbach *alpha*, was 0.84. Item reliability (*ISR* = 0.93) and model person reliability (*PSR* = 0.77) were good enough. Conventionally, the average difficulty of the 88 items was placed at zero on the *logit* scale. Winsteps allows to impute values to extreme items, if necessary

**TABLE 1**  
Move item statistics

| Item | $D_i$ | $SE$ | Infit | Outfit |
|------|-------|------|-------|--------|
| v1   | 0.74  | 0.20 | 1.14  | 1.27   |
| v2   | -0.88 | 0.37 | 1.04  | 0.62   |
| v3   | 0.86  | 0.19 | 1.15  | 1.23   |
| v4   | 0.48  | 0.22 | 0.97  | 1.00   |
| v5   | 0.16  | 0.24 | 1.03  | 0.99   |
| v6   | 0.48  | 0.22 | 0.94  | 0.80   |
| v7   | -1.39 | 0.46 | 1.08  | 1.12   |
| v8   | 0.28  | 0.23 | 1.04  | 0.96   |
| v9   | -0.18 | 0.28 | 1.14  | 1.34   |
| v10  | 0.10  | 0.25 | 1.03  | 1.555  |
| v11  | -0.43 | 0.31 | 0.83  | 0.40   |
| v12  | -1.39 | 0.46 | 1.09  | 1.80   |
| v13  | -0.75 | 0.35 | 1.01  | 0.53   |
| v14  | 3.69  | 0.15 | 1.26  | 1.41   |
| v15  | -0.26 | 0.29 | 1.10  | 1.15   |
| v16  | 0.66  | 0.21 | 1.08  | 1.03   |
| v17  | 0.62  | 0.21 | 0.90  | 0.66   |
| v18  | -0.64 | 0.33 | 0.88  | 0.47   |
| v19  | -0.88 | 0.37 | 0.93  | 0.88   |
| v22  | -1.39 | 0.46 | 0.94  | 1.12   |
| v23  | 0.22  | 0.24 | 0.96  | 0.88   |
| v24  | -0.10 | 0.27 | 0.95  | 0.71   |
| v25  | -1.63 | 0.51 | 0.85  | 0.26   |
| v26  | 0.22  | 0.24 | 1.00  | 1.14   |
| v27  | -1.20 | 0.42 | 1.08  | 1.04   |
| v28  | 3.86  | 0.16 | 1.15  | 1.18   |
| v29  | 1.04  | 0.18 | 0.98  | 0.87   |
| v30  | -1.63 | 0.51 | 1.02  | 2.13   |
| v31  | -1.39 | 0.46 | 0.88  | 0.35   |
| v32  | -1.03 | 0.39 | 1.00  | 0.67   |
| v33  | 0.70  | 0.20 | 1.00  | 0.82   |
| v34  | 1.14  | 0.18 | 0.97  | 0.85   |
| v35  | 0.38  | 0.23 | 0.88  | 0.65   |
| v36  | -1.03 | 0.39 | 1.11  | 1.30   |
| v37  | 1.50  | 0.20 | 1.05  | 0.99   |
| v38  | -2.35 | 0.72 | 0.98  | 0.21   |
| v39  | 0.10  | 0.25 | 0.87  | 0.63   |
| v40  | 1.44  | 0.17 | 0.98  | 0.87   |
| v41  | 0.43  | 0.22 | 0.96  | 0.80   |
| v42  | -0.43 | 0.31 | 0.98  | 0.89   |
| v43  | -0.03 | 0.26 | 0.96  | 0.79   |
| v44  | -0.88 | 0.37 | 1.00  | 0.54   |
| v45  | 0.04  | 0.26 | 0.92  | 0.99   |
| v46  | -1.03 | 0.39 | 0.96  | 0.74   |
| v47  | -1.20 | 0.42 | 0.92  | 0.53   |
| v48  | 0.43  | 0.22 | 0.92  | 0.66   |
| v49  | 2.15  | 0.15 | 1.16  | 1.19   |
| v50  | 1.14  | 0.18 | 1.18  | 1.34   |
| v51  | 0.38  | 0.23 | 0.96  | 0.83   |
| v52  | -1.93 | 0.59 | 0.80  | 0.13   |
| v53  | -0.88 | 0.37 | 0.98  | 0.98   |
| v54  | 2.17  | 0.15 | 1.16  | 1.30   |
| v55  | 0.86  | 0.19 | 1.00  | 0.92   |
| v56  | 1.60  | 0.16 | 1.12  | 1.26   |
| v57  | -0.26 | 0.29 | 0.92  | 0.64   |
| v58  | 0.57  | 0.21 | 0.84  | 0.58   |
| v59  | -1.20 | 0.42 | 1.09  | 1.11   |
| v60  | 0.43  | 0.22 | 0.94  | 0.70   |
| v61  | -1.93 | 0.59 | 0.90  | 0.99   |
| v62  | 2.44  | 0.15 | 1.18  | 1.20   |

**TABLE 1**  
Continued

| Item | $D_i$ | $SE$ | Infit | Outfit |
|------|-------|------|-------|--------|
| v63  | 1.01  | 0.19 | 1.03  | 0.96   |
| v64  | -0.34 | 0.30 | 0.95  | 0.85   |
| v65  | 1.71  | 0.16 | 0.89  | 0.81   |
| v66  | -0.10 | 0.27 | 0.89  | 0.69   |
| v67  | -0.03 | 0.26 | 1.01  | 0.86   |
| v68  | -1.39 | 0.46 | 0.94  | 0.75   |
| v69  | 2.18  | 0.15 | 0.95  | 0.97   |
| v70  | 0.53  | 0.22 | 0.95  | 0.86   |
| v71  | -1.93 | 0.59 | 0.87  | 0.33   |
| v72  | 0.78  | 0.20 | 0.93  | 0.88   |
| v73  | -0.88 | 0.37 | 1.00  | 0.80   |
| v74  | -0.26 | 0.29 | 0.94  | 0.79   |
| v75  | 3.06  | 0.15 | 1.12  | 1.17   |
| v76  | 1.55  | 0.16 | 1.03  | 0.93   |
| v77  | -0.34 | 0.30 | 0.94  | 0.71   |
| v78  | 2.04  | 0.15 | 1.06  | 1.09   |
| v79  | -0.53 | 0.32 | 0.91  | 0.62   |
| v80  | -2.35 | 0.72 | 0.99  | 0.76   |
| v81  | 0.04  | 0.26 | 0.86  | 0.53   |
| v82  | 1.73  | 0.16 | 1.06  | 1.01   |
| v83  | -1.03 | 0.39 | 0.92  | 0.68   |
| v84  | -0.75 | 0.35 | 1.10  | 1.22   |
| v85  | 0.10  | 0.25 | 0.93  | 0.65   |
| v86  | 0.82  | 0.20 | 1.03  | 0.99   |
| v87  | -0.53 | 0.32 | 1.00  | 0.88   |
| v88  | -3.06 | 1.01 | 1.02  | 0.44   |
| v89  | -3.06 | 1.01 | 1.03  | 0.96   |
| v90  | -1.93 | 0.59 | 0.99  | 0.54   |

Abbreviations:  $D_i$ , item difficulty in *logit* units;  $SE$ , standard error.

**TABLE 2**  
Move person data summary

|           | Mean | $SD$ | Maximum | Minimum |
|-----------|------|------|---------|---------|
| Raw score | 79.2 | 6.9  | 89.0    | 33.0    |
| $B_s$     | 2.78 | 0.90 | 5.47    | -0.84   |
| Infit     | 0.99 | 0.17 | 1.46    | 0.63    |
| Outfit    | 0.88 | 0.54 | 4.26    | 0.07    |

Abbreviations:  $B_s$ , measure of persons in *logit* units;  $SD$ , standard deviation.

for practical reasons (for items 20 and 21,  $D_i = -4.28$ ,  $SE = 1.83$ ). Average person aptitude in *logit* units was 2.78,  $SD = 0.90$ . A summary of person data is presented in Table 2.

One item (v3) showed gender-related DIF favouring women. Four items (v3, v8, v40, and v75) showed country-related DIF, favouring Argentinian subjects, that is, Argentinians had a higher probability of passing these items than Spanish subjects with the same total score. Item 82 showed country-related DIF, favouring Spanish subjects.

No gender differences (impact) in Rasch measures were found, *Welch-t* (218) = -0.17,  $p = .14$  (conventionally, 0 = female, 1 = male). However,

there was a significant difference in the MOVE test between Spanish and Argentinian subjects, favouring the Spaniards,  $Welch-t(215) = -5.87, p < .00$  (conventionally, 0 = Argentina, 1 = Spain).

## DISCUSSION

This study reports the design and initial validation of an emotion vocabulary test in Spanish, the MOVE. Ninety cloze multiple-choice items were written, following a corpus approach and expert judgement. Taking into account lexical and cultural variations within a given language will contribute to content validity from the initial stages of constructing of measures with good psychometric quality.

The test was administered to a Spanish speaking sample from two countries, Spain and Argentina, and analysed with the Rasch measurement model. Results show that 88 items have adequate fit, and that, overall, a substantial percentage of variance was explained by a latent variable; reliability indexes at the test, item, and person level were also adequate. The first contrast of the principal component analysis of residuals was slightly over the recommended value. This result could be due to the fact that the test measures a complex construct; items portray very diverse situations, and the responses are of different emotional types.

The average aptitude of the participants was 2.78 logits, that is, the test was quite easy for this sample (the zero of the scale is at the medium difficulty). The fact that all participants were university students could be considered only a limitation, which it is. However, taking into account that psychology students would be competent in affective vocabulary, it is noticeable that no one of them obtained a perfect score, that is, that no one answered correctly to the 90 items in the EV. Future studies could evaluate how experts in language and emotional knowledge, such as a selected sample of psychotherapists, score on the MOVE. On the other hand, the result that a considerable proportion of items had low difficulty may be useful with participants such as children or adolescents, who are still learning about emotions (Ogren & Sandhofer, 2022), patients with semantic dementia (Lindquist et al., 2014) or persons affected by primary progressive aphasia (Bertoux et al., 2020). Since the RM is an invariant measurement model with the formal property of specific objectivity, item calibration is independent of the sample when data-model fit is adequate enough, as it is the case. Now that initial evidence on content and structural validity has been provided, further research in other groups is needed to test the remaining facets of validity.

The fact that the MOVE test was more difficult for the Argentinian can be attributed to sample differences; for example, general vocabulary ability stemming from

the fact that the Spanish university requires a comprehensive entry test, whereas the Argentinian one does not. However, considering that the RM is an invariant measurement model and that very few items showed a country-related DIF, this sample difference would hardly affect the calibration of the items. In any case, future studies should explore country and cultural differences in community samples, as well as covariates such as general vocabulary or language abilities.

The MOVE test provides an objective measure of emotion vocabulary, which can be used in future research linking this knowledge to other emotion aspects, such as recognition and expression of emotional states from facial and bodily cues, or construction of an emotion as such (Barrett, 2017; Barrett et al., 2019), and affective experience in daily life (e.g., Yang, 2022). It can also be useful for research on emotional intelligence and related constructs (Kotsou et al., 2019). Regarding potential clinical applications, it has been noted that emotion vocabulary can be an indicator of well-being as well as of neural activity, which could be useful from a clinical and neurological diagnosis point of view (Vine et al., 2020). From an intervention perspective, emotion vocabulary could be useful as a component in psychotherapy (Brooks et al., 2017).

As for the application, following a fixed order of entry is a common procedure in psychometric tests of ability. Since there is no time limit for performing the test, it is unlikely that fatigue or other order effects could have influenced the actual results. In any case, the information provided in the two appendices would allow random sequences to be programmed if experimental research on this topic is to be carried out.

In conclusion, this study designed and initially validated an objective way to measure emotion vocabulary in Spanish. As a vocabulary test, the MOVE can be used not only in psychological and neurological investigation, but also in language learning research. Considering that validation is a continuous process over time, the next phases in the MOVE test validation should consist of convergent and discriminant validation studies in these areas.

## ETHICS STATEMENT

The ethical aspects of the research were approved by the University Bioethics Committee (2021/311). In compliance with international Ethical Standards, participants received an informative document that was also approved by the University Bioethics Committee. Informed Consent was not sought, as data collection was anonymous. No funding was received, and there were no conflicts of interest.

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## SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

**Data S1.** Supporting Information.

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## APPENDIX A

### ALPHABETICAL ORDER, ENTRY ORDER AND RIGHT ANSWER

| <i>Alphabetical</i> | <i>Entry</i> | <i>Right answer</i> |
|---------------------|--------------|---------------------|
| 1                   | 89           | aburrimiento        |
| 2                   | 83           | admiración          |
| 3                   | 7            | adoración           |
| 4                   | 20           | aflicción           |
| 5                   | 10           | alivio              |
| 6                   | 80           | amargura            |
| 7                   | 77           | angustia            |
| 8                   | 32           | anhelo              |
| 9                   | 33           | ansiedad            |
| 10                  | 42           | antipatía           |
| 11                  | 27           | añoranza            |
| 12                  | 38           | aprecio             |
| 13                  | 58           | apuro               |
| 14                  | 88           | arrobamiento        |
| 15                  | 74           | asco                |
| 16                  | 87           | asombro             |
| 17                  | 15           | aversión            |
| 18                  | 21           | benevolencia        |
| 19                  | 16           | bochorno            |
| 20                  | 35           | calma               |
| 21                  | 56           | cariño              |
| 22                  | 19           | Celos               |
| 23                  | 1            | cólera              |
| 24                  | 71           | comodidad           |
| 25                  | 18           | compasión           |
| 26                  | 14           | compenetración      |
| 27                  | 52           | confusión           |
| 28                  | 49           | conmiseración       |
| 29                  | 62           | culpabilidad        |
| 30                  | 70           | curiosidad          |
| 31                  | 11           | depresión           |
| 32                  | 26           | desagrado           |
| 33                  | 40           | desaire             |
| 34                  | 30           | desasosiego         |
| 35                  | 75           | desazón             |
| 36                  | 9            | desconsuelo         |
| 37                  | 90           | desdén              |
| 38                  | 4            | desolación          |
| 39                  | 66           | desprecio           |
| 40                  | 65           | dicha               |
| 41                  | 39           | diversión           |

| <i>Alphabetical</i> | <i>Entry</i> | <i>Right answer</i> |
|---------------------|--------------|---------------------|
| 42                  | 36           | duelo               |
| 43                  | 28           | embeleso            |
| 44                  | 8            | empatía             |
| 45                  | 78           | enfado              |
| 46                  | 3            | enojo               |
| 47                  | 50           | entusiasmo          |
| 48                  | 79           | envidia             |
| 49                  | 13           | espanto             |
| 50                  | 60           | exaltación          |
| 51                  | 67           | exasperación        |
| 52                  | 43           | excitación          |
| 53                  | 45           | éxtasis             |
| 54                  | 51           | exultación          |
| 55                  | 17           | furia               |
| 56                  | 47           | furor               |
| 57                  | 29           | gozo                |
| 58                  | 25           | grima               |
| 59                  | 64           | horror              |
| 60                  | 53           | hostilidad          |
| 61                  | 34           | humillación         |
| 62                  | 73           | indignación         |
| 63                  | 82           | inquietud           |
| 64                  | 22           | irritación          |
| 65                  | 81           | júbilo              |
| 66                  | 48           | melancolía          |
| 67                  | 69           | nerviosismo         |
| 68                  | 84           | nostalgia           |
| 69                  | 23           | odio                |
| 70                  | 54           | orgullo             |
| 71                  | 37           | pánico              |
| 72                  | 72           | pesadumbre          |
| 73                  | 6            | rabia               |
| 74                  | 5            | regocijo            |
| 75                  | 12           | relajación          |
| 76                  | 2            | rencor              |
| 77                  | 55           | repugnancia         |
| 78                  | 85           | repulsión           |
| 79                  | 63           | Resentimiento       |
| 80                  | 59           | satisfacción        |
| 81                  | 46           | serenidad           |
| 82                  | 68           | sobrecogimiento     |
| 83                  | 57           | sobresalto          |
| 84                  | 86           | susto               |
| 85                  | 41           | Temor               |
| 86                  | 61           | terror              |
| 87                  | 76           | tirria              |
| 88                  | 24           | tranquilidad        |
| 89                  | 31           | tristeza            |
| 90                  | 44           | vergüenza           |

## APPENDIX B

### MOVE ITEMS (ALPHABETICAL ORDER)

- 1 Me gustaría hablar contigo durante esas interminables tardes de \_\_\_\_.
- aburrimiento

- contento  
dilección
- 2 Abrió los ojos con \_\_\_\_ al ver el gran coche que conducías.  
abulia  
admiración  
atenuación
- 3 Le resulta gratificante ver la \_\_\_\_ en sus ojos cuando se encuentran.  
adoración  
alevosía  
epifanía
- 4 Me vine abajo por la \_\_\_\_ debida a su muerte.  
aflicción  
altivez  
animadversión
- 5 Es para mí un \_\_\_\_ poder salir de casa tras el divorcio.  
agobio  
agravio  
alivio
- 6 La \_\_\_\_ derivada de la injusticia se le notaba en la voz.  
amargura  
cohesión  
negligencia
- 7 Pensar en contagiarme de aquella enfermedad me producía \_\_\_\_.  
angustia  
pericia  
saña
- 8 Desde joven mostró un gran \_\_\_\_ de fama.  
anhelo  
arrojo  
encono
- 9 Nos desbordó la \_\_\_\_ en lugar de solucionar el problema.  
alegría  
ansiedad  
avenencia
- 10 Me parece inmoral la \_\_\_\_ que muestra por los más débiles.  
antipatía
- presteza  
vanidad
- 11 Pensar en los días felices pasados junto a aquel río me llena de \_\_\_\_.  
ansia  
añoranza  
pugna
- 12 Tras tanto tiempo sin vernos, creí que su sonrisa era una muestra de \_\_\_\_.  
afán  
aprecio  
quietud
- 13 Me puso en un gran \_\_\_\_ al obligarme a hacer aquello.  
apuro  
ímpetu  
lenitivo
- 14 En aquel edificio sublime, sentí que el \_\_\_\_ me embargaba.  
arranque  
arrobamiento  
azoramiento
- 15 Me da \_\_\_\_ saber que han hecho algo tan horrible.  
aplomo  
asco  
diligencia
- 16 La decepción por su aspecto superó al \_\_\_\_ de habernos encontrado.  
abandono  
asombro  
desagravio
- 17 Pude ver la \_\_\_\_ en sus ojos al encontrar a quien tan mal los había tratado.  
aversión  
impaciencia  
intrepidez
- 18 Me trató con \_\_\_\_ pese a mis errores.  
alteración  
benevolencia  
logro
- 19 Qué \_\_\_\_ saber que mis vecinos me vieron en una situación tan comprometida.  
afectación

- bochorno  
felicidad
- 20 En momentos difíciles hay que saber mantener la \_\_\_\_.
- calma  
disculpa  
postración
- 21 Me mostró su \_\_\_\_ ayudándome en lo que pudo.
- ausencia  
cariño  
patetismo
- 22 \_\_\_\_, ahí está el motivo de que la relación fallara.
- Aprensión  
Celos  
Regodeo
- 23 Es una persona infeliz dominada por la \_\_\_\_.
- cólera  
estima  
reparación
- 24 Qué \_\_\_\_ vivir sin más preocupaciones que las del día a día.
- avaricia  
comodidad  
convulsión
- 25 En estos momentos difíciles, tu \_\_\_\_ puede servirle de ayuda.
- compasión  
dependencia  
intolerancia
- 26 Se entendían, se notaba que había una gran \_\_\_\_ entre madre e hija.
- compenetración  
desdicha  
incuria
- 27 Tras el accidente, se encontraba en un estado de \_\_\_\_.
- confusión  
decepción  
esparcimiento
- 28 Ha padecido tanto que merece nuestra \_\_\_\_.
- bondad  
conmiseración
- euforia
- 29 Viendo su apagada expresión, su \_\_\_\_ parecía evidente.
- culminación  
culpabilidad  
deseo
- 30 Todo le interesa, siente gran \_\_\_\_.
- curiosidad  
descuido  
gracilidad
- 31 Estaba mal, había vuelto a caer en la \_\_\_\_.
- depresión  
peculiaridad  
prestancia
- 32 Su forma de comer me causa \_\_\_\_.
- desagrado  
desaliento  
desorientación
- 33 Evitó saludarme, qué gran \_\_\_\_.
- complacencia  
desaire  
fortaleza
- 34 El \_\_\_\_ me invade cuando escucho las noticias.
- desasimiento  
desasosiego  
desprestigio
- 35 Qué \_\_\_\_, vivo sin saber por qué me pasa lo que me pasa.
- agravación  
condescendencia  
desazón
- 36 Se dejó llevar por el \_\_\_\_ tras la pérdida del hijo.
- desconsuelo  
gracejo  
recelo
- 37 Es una mala persona que solo merece \_\_\_\_.
- desdén  
interés  
irrisión
- 38 Qué \_\_\_\_, ver la ciudad arrasada tras la tormenta.
- animación

- desolación  
discordia
- 39 Nos miran con \_\_\_\_\_, como si fueran alguien.  
desprecio  
desunión  
desvalimiento
- 40 Cuando por fin apareció la hija perdida, volvió la \_\_\_\_\_ al hogar.  
dicha  
firmeza  
indolencia
- 41 Fue la ausencia de \_\_\_\_\_ la que los llevó a separarse siendo tan jóvenes.  
arrogancia  
diversión  
duda
- 42 Ya puede salir a la calle, parece que superó el \_\_\_\_\_.  
duelo  
fervor  
frenesí
- 43 Hace poco que son novios, se miran con \_\_\_\_\_ a todas horas.  
embeleso  
consuelo  
repudio
- 44 Le falta \_\_\_\_\_, ignora lo que estás pasando.  
dominación  
empatía  
encanto
- 45 Se dejó llevar por el \_\_\_\_\_ tras fracasar en conseguir su objetivo.  
enfado  
menosprecio  
optimismo
- 46 Grita mucho, continuamente da muestras de \_\_\_\_\_.  
enojo  
humildad  
ilusión
- 47 Trabaja mucho y además todo lo hace con \_\_\_\_\_.  
acidia  
entusiasmo  
fastidio
- 48 Qué \_\_\_\_\_, contemplar los éxitos del vecino.  
corrupción  
dentera  
envidia
- 49 Está en una situación tan dura que provoca \_\_\_\_\_.  
espanto  
extrañeza  
hastío
- 50 Parecía que iba a estallar, tan grande era su \_\_\_\_\_.  
estremecimiento  
estupor  
exaltación
- 51 Mi \_\_\_\_\_ iba en aumento con sus provocaciones.  
desventura  
deterioro  
exasperación
- 52 Su \_\_\_\_\_ aumentaba a medida que nos acercábamos al estadio.  
desprotección  
excitación  
mezquindad
- 53 Después de la bella ceremonia, me encontré en un estado como de \_\_\_\_\_.  
desesperación  
éxtasis  
impotencia
- 54 Mostraba tal \_\_\_\_\_ que tratamos de evitar que se decepcionara.  
exultación  
indiferencia  
trance
- 55 Después de la \_\_\_\_\_, llegan los remordimientos por lo que hicimos.  
desgana  
furia  
imperturbabilidad
- 56 Escribía con \_\_\_\_\_, como si faltara tiempo.  
animosidad  
desidia  
furor
- 57 Salir a pasear de madrugada es su única fuente de \_\_\_\_\_.  
cuidado

- gozo  
lástima
- 58 Da \_\_\_\_\_ ver cómo comen.  
dispersión  
grima  
incapacidad
- 59 Tras sufrir tanto \_\_\_\_\_ en la guerra va a ser difícil que se recupere.  
horror  
pesimismo  
pudor
- 60 Me mira con \_\_\_\_\_ a partir de aquella riña, esto no ha acabado.  
desánimo  
hostilidad  
murria
- 61 Tras la \_\_\_\_\_ a la que me sometió vino mi despido.  
humillación  
iniciativa  
plenitud
- 62 Actuar con \_\_\_\_\_ puede tener consecuencias poco recomendables.  
alborozo  
armonía  
indignación
- 63 Muestra poca \_\_\_\_\_ pese a los problemas que tiene.  
afectividad  
inquietud  
intriga
- 64 Tras un ofensivo discurso, el público mostró su \_\_\_\_\_.  
derrota  
inseguridad  
irritación
- 65 Hay formas más sinceras de mostrar \_\_\_\_\_ por los éxitos ajenos.  
atracción  
júbilo  
turbación
- 66 Pensar en el pasado le provoca \_\_\_\_\_.  
generosidad  
inestabilidad  
melancolía
- 67 Víctima del \_\_\_\_\_, empezó a tartamudear.  
abatimiento  
apego  
nerviosismo
- 68 Pensar en el pueblo que dejó atrás le llena de \_\_\_\_\_.  
nostalgia  
obnubilación  
ostentación
- 69 Fue el \_\_\_\_\_ que sentían por su tierra lo que les llevó a emigrar.  
desconcierto  
extravío  
odio
- 70 El \_\_\_\_\_ por mostrar un trabajo tan bien hecho es suficiente para seguir.  
amor  
miedo  
orgullo
- 71 Conducir por un puente alto le provoca \_\_\_\_\_.  
aspaviento  
pánico  
pena
- 72 La \_\_\_\_\_ por la muerte del amigo se le hacía insostenible.  
desilusión  
obstinación  
pesadumbre
- 73 Qué \_\_\_\_\_ vernos todos los días sabiendo lo que dice de mí.  
aprobación  
rabia  
reserva
- 74 Para mi \_\_\_\_\_ empezaron a cantar mis canciones favoritas.  
frustración  
regocijo  
represión
- 75 Tanta \_\_\_\_\_ ha de ser dañina para los estudios de los jóvenes.  
aceptación  
ira  
relajación

- 76 El \_\_\_\_\_ por el mal que me hizo es una pérdida de tiempo.  
disgusto  
rencor  
rubor
- 77 Al pasar por la calle de esa persona traidora solo siento \_\_\_\_\_.  
preocupación  
repugnancia  
respeto
- 78 Me provoca \_\_\_\_\_ saber que tanto delincuente anda libre.  
repulsión  
resignación  
respiro
- 79 \_\_\_\_\_, la consecuencia de la mayor parte de los divorcios.  
Apoyo  
Resentimiento  
Seguridad
- 80 Qué \_\_\_\_\_, ver crecer sanos a los hijos.  
apatía  
comprensión  
satisfacción
- 81 El dulce rostro de la anciana fallecida mostraba \_\_\_\_\_.  
desencanto  
resquemor  
serenidad
- 82 Al oír el trueno, me sentí invadida por el \_\_\_\_\_.  
sobrecogimiento  
sosiego  
trajín
- 83 Qué \_\_\_\_\_, pensé que la niña se había perdido.  
sobresalto  
solidaridad  
terquedad
- 84 Qué \_\_\_\_\_, encontrar un ratón en la cocina.  
sorna  
susto  
ternura
- 85 \_\_\_\_\_, lo que inspiran los tiranos para dominarnos.  
Suficiencia  
Temor  
Timidez
- 86 Era \_\_\_\_\_ lo que sentía la niña al ver a su exigente abuela.  
soledad  
sorpresa  
terror
- 87 El profesor le tiene \_\_\_\_\_ y le pone malas calificaciones  
confianza  
simpatía  
tirria
- 88 Quiero vivir sin problemas, con \_\_\_\_\_.  
tranquilidad  
vulnerabilidad  
zozobra
- 89 Qué \_\_\_\_\_, ver morir a un amigo.  
sumisión  
tristeza  
vacilación
- 90 Me da \_\_\_\_\_ que me vean con los zapatos sucios.  
desconsideración  
sospecha  
vergüenza