

The Jingle and Jangle of Emotion Assessment:

Imprecise Measurement, Casual Scale Usage, and Conceptual Fuzziness in Emotion Research

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How are momentary distinct emotions measured with self-report?

- Contemporary social-personality research has seen a surge of interest in measuring momentary distinct emotional states with self-reports
- Yet, most validated self-report emotion scales measure dispositional emotions or broad affect dimensions
- This raises the question: How are researchers measuring state emotions?
- We addressed this issue by systematically coding studies that have measured momentary distinct emotions through self-report

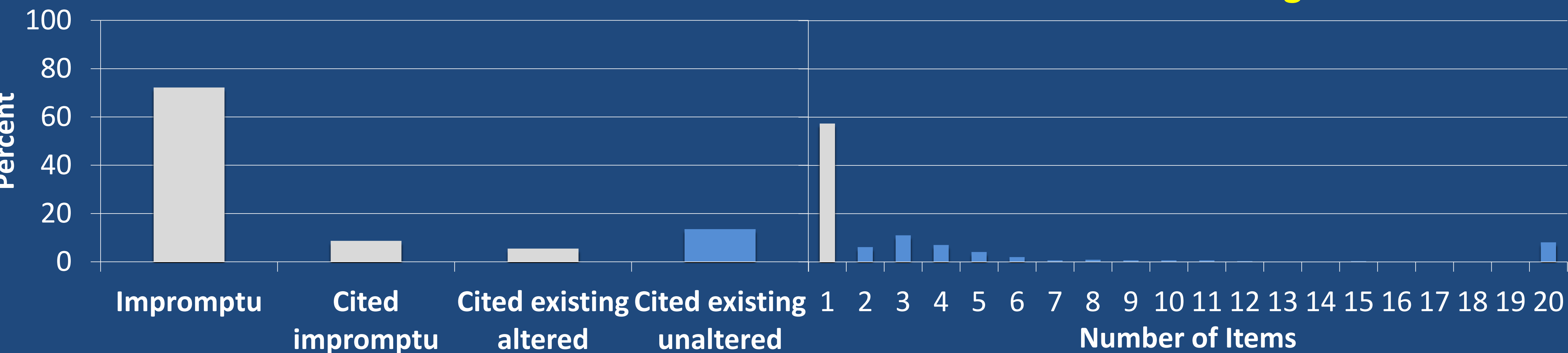
Our Approach

- We coded 58% of articles published in Emotion from 2001-2011 (n = 30 issues, 467 articles, 751 studies)
- We identified 345 measurement instances: Each time a distinct emotional state was measured by a single scale within a single study
- For each measurement instance, we coded
 - The emotion measured
 - Scale items used
 - Prior content validation of the scale, based on the categories:
 - Impromptu: Scale was developed in an impromptu fashion, with no reference to prior research
 - Cited impromptu: Scale was taken from a previous study in which it had been developed in an impromptu fashion
 - Cited existing altered: Scale was validated in previous research but altered for the present measurement instance
 - Cited existing unaltered: Scale was validated in previous research and not altered for the present measurement instance
 - Scale length
 - Scale internal consistency (if reported)

What are the psychometric properties of scales used to measure distinct emotions?

Prior Content Validation

Scale Length



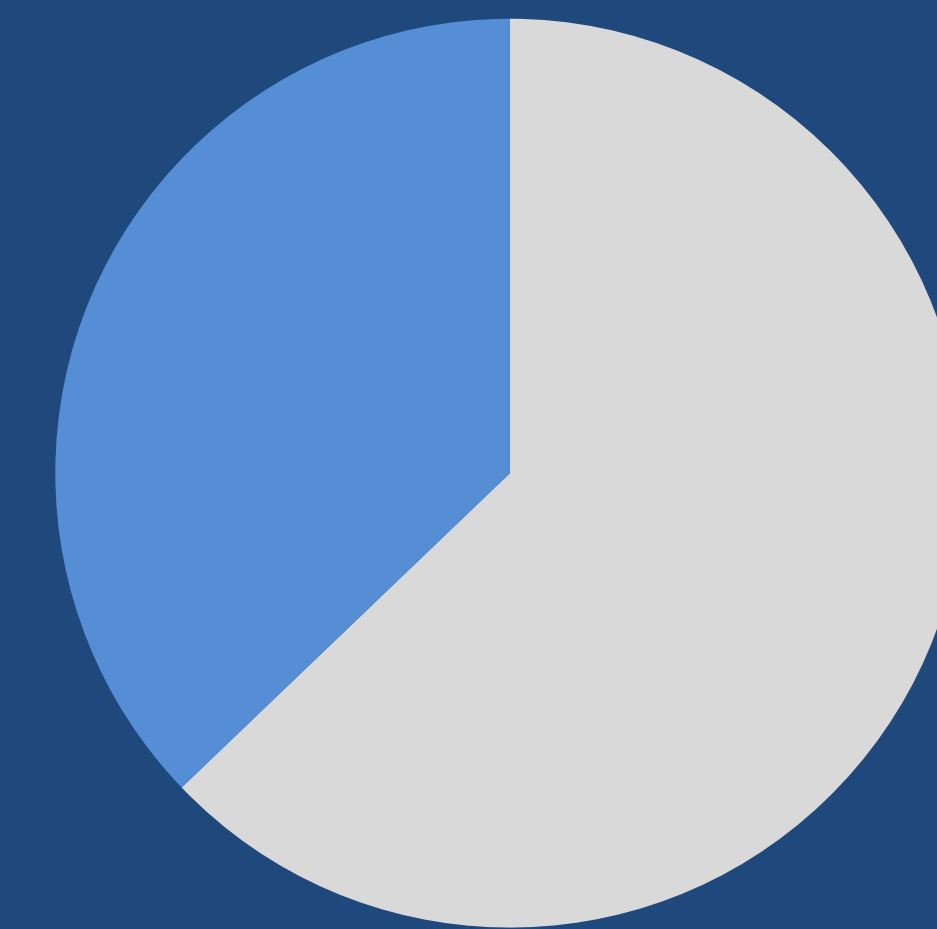
298 scales (86%) were not systematically validated

198 scales (57%) were comprised of a single item
M = 3.64 items; Median = 1; SD = 5.28

Reliability

Multi-item scale (reliability reported): n = 66 (19%) Mean coefficient $\alpha = .83$ (SD = .09)
Multi-item scale (reliability not reported): n = 80 (23%)
Single-Item scale (reliability unknown): n = 198 (57%)

Do scale items distinguish between purportedly distinct emotions?

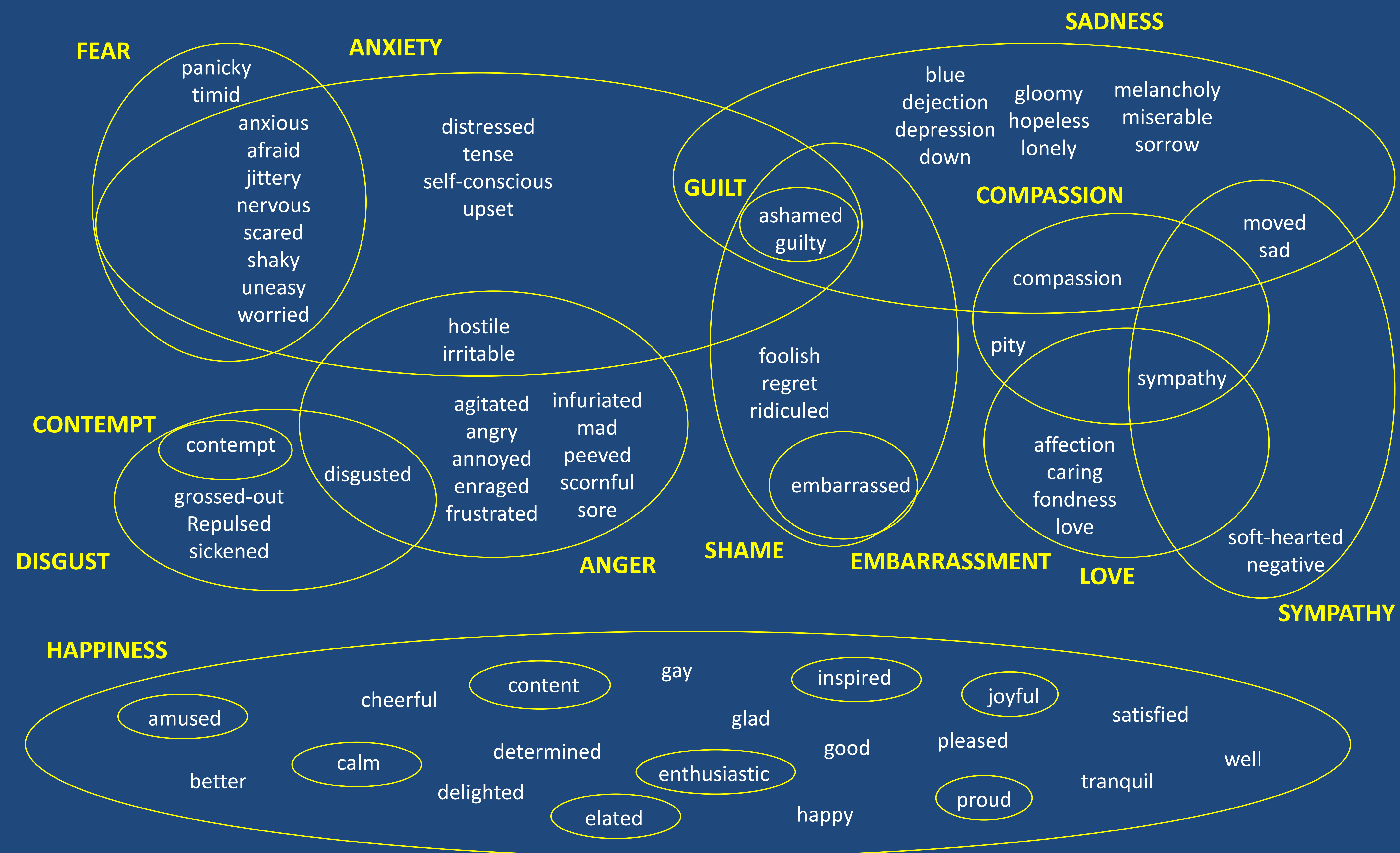


Unique items: Adjectives and phrases used to measure only one emotion
n = 94; 37%

Overlapping items: Adjectives and phrases used to measure multiple emotions
n = 159; 63%

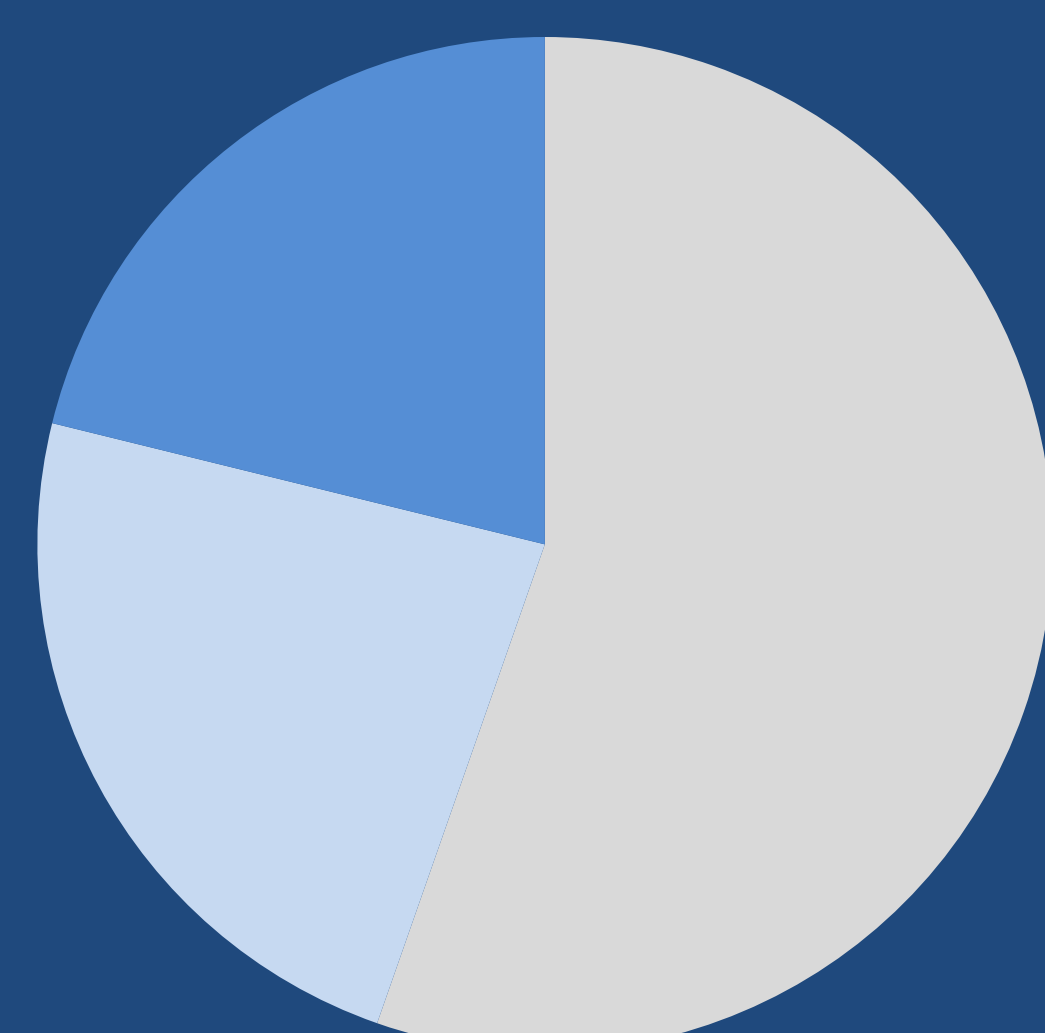
In total, 253 words and short phrases were used to measure emotions
n = 225 adjectives (e.g., happy, sad, angry)
n = 28 short phrases (e.g., "I violated a norm"; "I want to avoid someone")

What words are used to measure distinct emotions?



Words that appear in circles were also used in a separate scale to measure the emotion identified by that word e.g., *amused* was also used to measure the emotion amusement; *proud* was also used to measure the emotion pride

Which distinct emotions are currently measured with self-report?



Frequent emotions Measured more than 10 times (5 emotions; 55% of measurement instances) anxiety, anger, fear, happiness, sadness
Occasional emotions Measured 4-10 times (13 emotions; 23% of measurement instances) e.g., amusement, awe, disgust, guilt, hope, love, pride, schadenfreude, shame
Rare emotions Measured fewer than 4 times (48 emotions; 21% of measurement instances) e.g., desire, distress, excitement, melancholy, nurturant love, symhedonia, tension

Conclusions

- The majority of words and phrases used to measure state emotions are used to measure multiple different emotions across different studies
- The 66 purportedly distinct emotions currently measured is far more than would be suggested by existing taxonomies (e.g., Ekman & Friesen, 1971; Panksepp, 2007; Shaver et al., 1987; Tracy & Robins, 2008)
- The majority of scales used to measure momentary distinct emotions suffer from several potential problems:
 - Developed impromptu with no reference to prior literature
 - Consist of only one item
 - Have unknown or unreported reliability
- Current measurement practices create confusion regarding which distinct emotion is being measured in any given instance
- This introduces ambiguity into interpretations of empirical findings
- Researchers should take steps to develop and validate a set of scales with which to measure momentary distinct emotions