

Picking Up Good Vibrations: Mapping the Full Range of Positive Emotions

Aaron C. Weidman and Jessica L. Tracy University of British Columbia

Research on Distinct Positive Emotions is Thriving

- In recent years, there has been a major increase in research on distinct positive emotions such as admiration, amusement, awe, compassion, empathy, gratitude, love, pride, and schadenfreude
- Two broad issues characterize this work:
 - Most studies examine only a select few emotions, precluding comparisons among the full range positive emotions
 - These studies typically fail to map out the psychological content of the positive emotions they do examine, making it unclear what, exactly, these states are
- Current Research Goals:
 - Develop a comprehensive taxonomy of distinct positive emotions, by uncovering the experiential content of all subjectively experienced positive emotions
 - Identify which positive emotions are associated with distinct subjective experiences (e.g., thoughts, feelings, and behaviors)
 - Understand how these emotions are interrelated

Part 1: Uncovering the Content of Each Positive Emotion

- Preliminary Study: Undergraduate participants ($n = 30$) generated thoughts, feelings, and behaviors for 18 positive emotions ($M = 26$ components per emotion)
 - We included all emotions that were examined in 3 or more studies published in *Emotion* 2001-2012
- Study 1: 2,581 undergraduates wrote about a past experience of one of the 18 positive emotions
 - Participants rated their feelings in response to each experience using items generated for the targeted emotional experience in the Preliminary Study, along with items generated for 2-3 other conceptually relevant emotions
 - e.g., in response to admiration, participants rated items we had generated for admiration, awe, and gratitude
 - Participants also rated their feelings of pleasantness and arousal in response to the emotional experience (Barrett & Russell, 1998)
- Factor analyses of participants' ratings determined core thoughts, feelings, and behaviors associated with each emotion
- We selected 3-5 best items for each emotion to comprise scales
- Included items with primary loadings $> .40$ on the target emotion, and cross-loadings $< .30$ on other emotions

Subjective Components Selected to Comprise a Scale for the "Other-Appreciation" Emotions

Admiration	Awe	Gratitude
I felt a desire to become more like a specific person	I continued to think about what I just saw	I felt appreciative toward a specific
I felt as if I could learn a lot from a specific person	I could not believe what I had just seen	I felt like I had benefited from a specific person's action
I felt motivated to work harder	I felt I was in the presence of something quite out of the ordinary	I felt lucky to know a specific person
	I was rendered speechless	

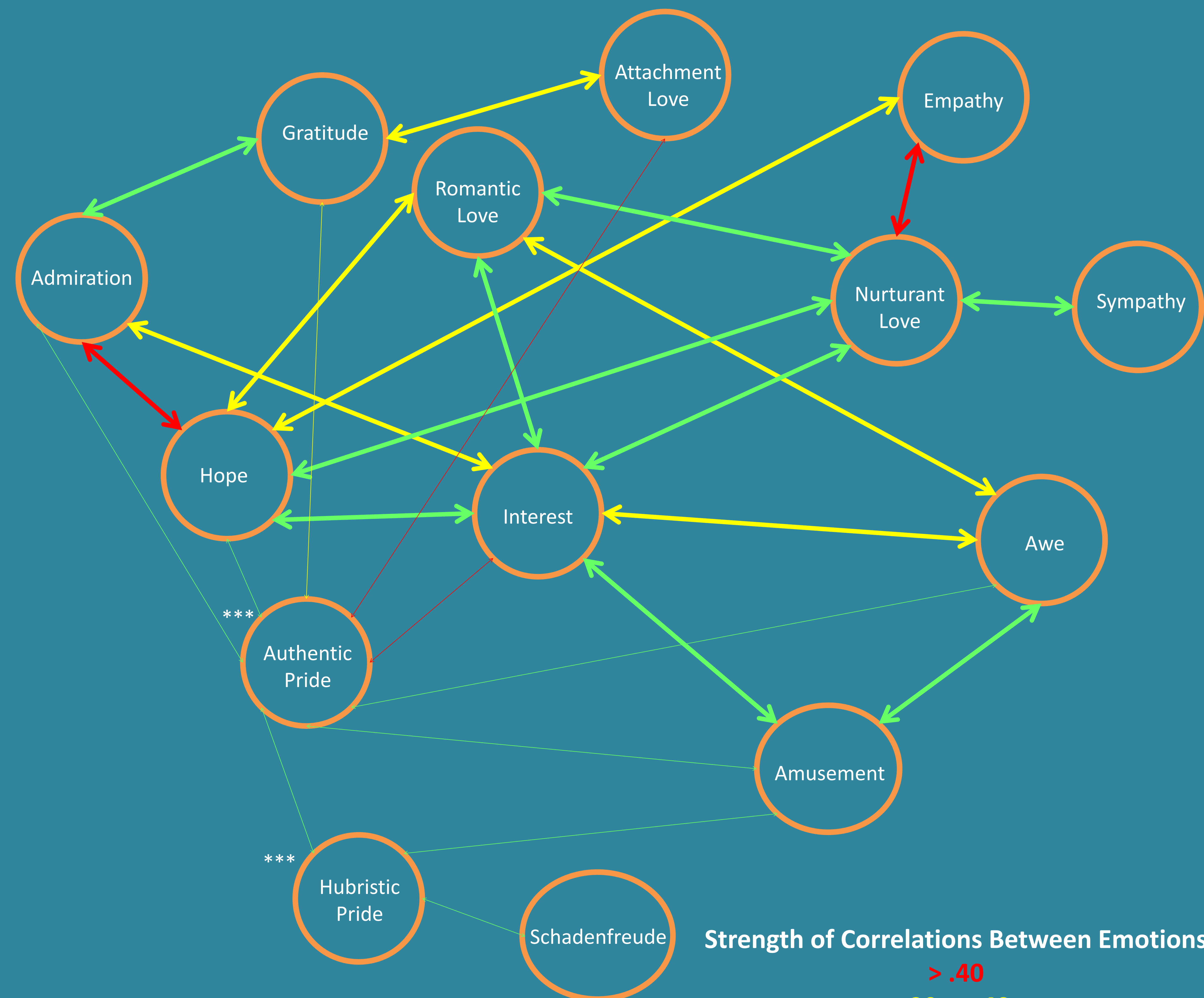
Conclusions

- Fourteen positive emotions were experienced distinctly at the self-report level: Admiration, amusement, attachment love, awe, authentic pride, empathy, gratitude, hope, hubristic pride, interest, nurturant love, romantic love, schadenfreude, and sympathy
- In contrast, the subjective components comprising tenderness and compassion overlap substantially with components of attachment love, empathy, nurturant love, romantic love, and sympathy; tenderness and compassion are therefore best considered blends of these other emotions
- Contentment and enthusiasm correlated .68 and .65 with pleasantness and arousal, respectively. Contentment is therefore best conceptualized as pleasant affect, and enthusiasm is best conceptualized as aroused affect, rather than each as a distinct positive emotion
- Results allowed us to develop brief, reliable, 3-5 item scales for each of the distinct positive emotions
- Notably, single words (e.g., "I felt awe") correlated only .52, on average, with corresponding multi-item scales for each emotion (range: .25-.71), highlighting the need for multi-item scales that may better capture the full domain of each emotional state

Part 2: Examining Interrelations Among All Positive Emotions

- Study 2: As in Study 1, 1,533 undergraduates wrote about a past experience of one positive emotion
- Participants rated their feelings using all positive emotion scales developed in Part 1
- We examined inter-correlations among emotion scales to determine which positive emotions were experienced distinctly (see Figure)
- Any two positive emotions were considered distinct if they correlated less than .50 on average, following episodes of each
- e.g., tenderness and attachment love correlated .54 following tenderness episodes, and .52 following attachment love episodes, and were therefore not considered distinct

A Taxonomy of Positive Emotions



Strength of Correlations Between Emotions

> .40
 .30 to .40
 .20 to .30
 no arrow: < .20

***Note: Correlations involving authentic and hubristic pride are based on ratings following episodes of pride only, and therefore do not take into account ratings following episodes of the other positive emotions to which pride is linked. They should therefore be interpreted with caution.