



## UvA-DARE (Digital Academic Repository)

### Expressing positive emotions as they are

*Spontaneous production, display rules, and the role of culture*

Manokara, K.

#### Publication date

2023

[Link to publication](#)

#### Citation for published version (APA):

Manokara, K. (2023). *Expressing positive emotions as they are: Spontaneous production, display rules, and the role of culture*. [Thesis, fully internal, Universiteit van Amsterdam].

#### General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

#### Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

### **General Discussion**

Positive emotions, and their expressions to others, are an integral part of human life. Saying and receiving thanks when grateful helps build and sustain social relationships (Eibach et al., 2015), romantic interactions live and die by expressions of tenderness and sexual desire (Gonzaga et al., 2006), shared epistemological interests with others drive the pursuit of knowledge and discovery (Silvia, 2005), taking pride in the work they do keeps people motivated in their jobs (Tracy & Robins, 2004), and being hopeful for a brighter future, along with communicating our hope to others, is essential for collective action (Cohen-chen et al., 2019). For both applied and theoretical purposes (Keltner & Cowen, 2021; Shiota et al., 2017), it is thus important to advance our understanding of positive emotions, including how they are expressed, particularly in relation to context (see Greenaway et al., 2018) and culture (see Kitayama et al., 2000). This dissertation seeks to contribute to the wider scientific discourse on positive emotional expressions. It does so by answering three related questions: (a) when produced spontaneously on the face, what do specific positive emotions look like? (b) are there rules for the expression of specific positive emotions, and if so, are there consequences for breaking these rules? (c) to what degree does culture influence the expression of positive emotions?

#### **On the spontaneous nature of emotional expressions**

The earliest (Darwin, 1872) and to date most influential theorizing in emotional expressions (Ekman, 1994) operate from the premise that people produce emotional behaviors in their everyday lives (e.g., disgust is shown by a nose scrounge when a pungent odor is smelt). Yet most empirical research on emotional expressions has been conducted from a perception angle (e.g., whether disgust can be identified from a nose scrounge: Rozin et al., 2005), which answers a different question from what was initially theorized about. When conducted, studies on emotion production have largely focused on posed or acted

displays (see Sauter & Fischer, 2018), which critics warn are far removed from emotional expressions as they occur in the real world (Russell, 1991). We address these limitations in Chapter 2, by drawing together and testing how 22 positive emotions are spontaneously produced on the face when recalled freely. Facial expressions were subject to network analyses, which allowed us to infer degrees of specificity (whether each emotion may have unique patterns of facial behaviors associated with them), complexity (the number of combinatory facial actions that characterize an emotion), and consistency (to what extent these patterns of facial behaviors co-occur across individuals).

When expressed spontaneously, consistent patterns of facial expressions were surfaced for 16 of the 22 positive emotions. These emotions were found to have expressive patterns that consistently occurred in more than half of our sample. Moreover, our results pointed to three sets of positive emotions, when classified in terms of their expressive consistency and complexity. A first set of emotions (e.g., amusement, elation, excitement, positive surprise) were highly complex and consistent, and most of these emotions were also reported to be high in terms of physiological arousal (e.g., activating emotions), which potentially explains the multiple facial actions that co-occur when they are elicited (Reisenzein et al., 1994). A second set of emotions were relatively consistent, albeit simpler in their expressive patterns (e.g., eye closure for sexual desire, raised eyebrows for hope). Most of these emotions did not involve a smile, adding to the growing acknowledgement that not all pleasant states necessarily include smiling (see also Mortillaro et al., 2011). A final set of emotions were not found to have specific patterns of expressive behaviors that could be reliably interpreted (e.g., feeling moved, moral elevation). It is in theory possible that these emotions do not have facial actions particularly associated with them, however given the limitations of our methods (e.g., the full repertoire of facial behaviors could not be examined), we tentatively view the obtained evidence as inconclusive.

**Conclusion I:** At least 16 specific positive emotions are associated with particular sets of facial behaviors when produced spontaneously (Chapter 2).

***Implications: Bridging Theory with Empirical Methods***

Though researchers agree that spontaneous emotional expressions need to be studied, they have received little attention due to feasibility barriers (e.g., data collection and pre-processing is time and money intense). To our knowledge, Chapter 2 marks the first attempt at trying to answer the question of whether spontaneously expressed positive emotions are associated with distinct facial behaviors. Our efforts provide a substantial update to the prevailing understanding of how specific emotions are expressed. The earliest and most influential theories of emotional expressions are premised upon on how human beings produce emotional expressions (Darwin, 1872), yet much of the empirical research that supports these assertions are informed by perceptual judgment tasks (see Sauter, 2017). Addressing this disjuncture is a necessary step towards greater congruence between theory and empirical data. Doing so allows for a more accurate test of claims about how people actually express themselves when they feel positive, which was the primary aim of our work.

Although all pleasant feelings were initially thought to be characterized by smiling (Ekman, 1992), we suggest that at least eight positive emotions (e.g., relief, hope) appear to involve consistent facial expressions that do not include a smile. Just as not all smiles necessarily reflect internal states that feel good (e.g., smiling as a means to mask anger, or to cope with sadness: Matsumoto et al., 2005), not all pleasant feelings are compulsorily expressed through smiling. We hence add nuance to the often-assumed relationship between positive emotions and the expression of a smile (Shiota et al., 2021). Furthermore, we point to a tentative map of facial behaviors for 16 different positive emotions, some of which have

received little to no empirical attention by researchers studying nonverbal emotional expressions, although they have been examined from other perspectives (e.g., use of words for gratitude: Williams & Bartlett, 2015; perceiving hopeful situations: Cohen-Chen et al., 2019). Our work provides a missing piece of the puzzle by demonstrating that there appear to be consistent patterns of expression for some of these emotions (e.g., awe: Monroy & Keltner, 2022), while others are not clearly associated with consistent facial behaviors (e.g., moral elevation: Aquino et al., 2011). Our findings hence contribute to theory building for the multiple lines of work we drew inspiration from, and we thereby add to the growing science of specific positive emotions (Shiota et al., 2017).

***Limitations and Future Directions: Modality Combinations and Perception***

The main drawback of this work has to do with our focus on facial expressions. Positive emotions are known to be expressed with a variety of modalities beyond the face, including postural cues (Tracy & Matsumoto, 2008), touch (App et al., 2011), vocalizations (Sauter et al., 2010), and words (Wang et al., 2015). Some emerging work has pointed to the role of modality combinations in raising the accuracy of emotion perception (e.g., pride is more easily recognized when a straightened back accompanies a smile: Tracy & Robins, 2004), including for spontaneous expressions (Sauter & Fischer, 2018). Our focus on facial expressions could explain why only small effects were obtained in our research. There could in theory be greater specificity, including for emotions that we did not find specific patterns of expressions for (e.g., feeling moved). In order to unearth such patterns, researchers would have to examine multiple modalities in combination with one another from a production angle. This is an exciting if challenging future direction, which would enable a more comprehensive understanding of exactly when and how expressions of specific positive emotions differ from one another.

On the note of perceptual judgments, a meaningful future direction would involve directly comparing our findings with results obtained from recent work on perception. Scholars have demonstrated that naturalistic facial expressions of positive emotions can be identified by human observers with some degree of accuracy (e.g., awe, sexual desire, elation: Cordaro et al., 2020), and in our work, we show that spontaneous displays of at least 16 positive emotions are associated with specific and relatively consistent patterns of facial expressions. Integrating these results would be to examine if production and perception paradigms lead to similar conclusions, and if not, whether differences are qualitatively distinct (e.g., wholly different sets of facial behaviors for production than perception) or quantitative (e.g., overlapping facial behaviors with additional actions per paradigm). Two important linking steps would be necessary in such an approach. First, applying FACS coding to naturalistic expressions that other researchers have assembled (e.g., extracted from online sources: Cowen & Keltner, 2020) to unpack which facial behaviors denote each identifiable emotion. Next, getting human observers to classify the spontaneous expressions from our dataset, to understand if stable patterns of expressions would be accurately identified as belonging to a specific emotion. Comparing these rich sets of data would provide clarity on the differences between signals (which are communicative) and signs (that are not inherently so) in expressing emotion (see Sauter & Russell, 2020). Furthermore, such work would bring the field closer to testing the initial theoretical claims made by scientists about emotional expressions as they unfurl (see Ekman, 1992), by shedding light on whether production and perception could indeed be viewed as two sides of the same coin.

### **On whether all that feels good can be expressed**

Expressions of joy are in general considered more appropriate for display than negative emotional states (see Saarni, 1979). Such is the permissibility of expressing happiness, that it emerges as a consistent finding across multiple contexts (Matsumoto et al.,

2008). In fact, holding back on joyful smiles (thought to be an affiliative gesture: Hess et al., 2005) can have ramifications for the expresser in situations where expressions of warmth or friendliness is expected (e.g., customer service jobs: Diefendorff et al., 2006). However, people do not always show others when they feel good. An emerging line of work has suggested that even for positive emotions, open displays may be discouraged in particular contexts, depending on what the expression may signal to onlookers (see Van Kleef, 2009); Displaying amusement at a funeral would be seen as insensitive (Kastendieck et al., 2021), and unrestrained expressers of triumph may be perceived as conceited (Kalokerinos et al., 2014). When viewed in parallel, these scattered sets of findings point to the possibility that the acceptability of an emotional expression should in theory differ between specific positive emotions, as well as between contexts.

We addressed this question in Chapter 3, by testing the hypothesis that expressivity norms (or display rules: Matsumoto et al., 2005) would differ between specific positive emotions. We first developed and psychometrically validated a measure of display rules that was purpose-built to be sensitive to the fine-grained differences in expressive behaviors between multiple positive emotions. Thereafter, we mapped out context-specific display rules for eight positive emotions in five countries, and our results illustrated consistent cross-emotion differences in expressivity norms. Expressions of *gratitude*, *interest*, and *amusement* were generally thought to be acceptable (i.e., had weaker display rules), while displays of *sensory pleasure*, *feeling moved*, and to some degree *triumph*, were thought to be less appropriate for expression (i.e., had stronger display rules). Furthermore, social context substantially influenced display rules. Expressions of positive emotions were in general thought to be more acceptable when in the company of close others (as compared to distant others), and in private (rather than public). Our findings denote that not all that feels good is

considered equally appropriate for expression. We tentatively suggest that the social signaling value of an emotional expression may be a potential explanation for why.

Building atop these findings, in Chapter 4 we empirically demonstrate the consequences faced by those who break display rules for specific positive emotions, and we do so using an experimental approach. Expressers who downplay their gratitude, and to a lesser degree interest, are deprived of social contact and power, and restrained displays of feeling moved are also met with reduced contact. A duality emerges for triumph, where amplified expressers are socially avoided, yet at the same time, those who downplay their victory are seen to be less powerful. Even for pleasant feelings, showing too much – or too little – can thus lead to social costs. Finally, we demonstrate a role of person-perception mechanisms (warmth and competence) as underlying explanators for these effects. In sum, there are optimal levels of showing that one feels good and deviating from these expectations is met with differing sanctions depending on the positive emotion being shown.

***Conclusion II:*** Display rules apply even for emotions that feel good (Chapter 3), and breaking these rules have social ramifications for the expresser (Chapter 4).

***Implications: Asymmetry between Experience and Outcome***

Taken together, Chapters 3 and 4 illustrate the interplay between social norms and positive emotional expressions, thereby contributing to the intersection of affective science and social psychology (e.g., impression management: Bourdage et al., 2015; interpersonal emotion regulation: Gross, 2015; emotional labor in the workplace: (Grandey et al., 2010)). We provide the first map of expressivity norms for specific positive emotions and present findings that challenge the assumption that feeling pleasant is broadly characterized by lenient display rules. Going a step further, we then shed light on a novel asymmetry between



experienced valence and expression outcome: when displayed in ways deemed inappropriate, even pleasant feelings may have unpleasant consequences in the social world. Our work fits with emergent theorizing on different ways to organize the positive emotion space, with new dimensions that account for more than just pleasantness of subjective experience alone. For example, a pleasant emotional experience may constitute an emotional expression that is perceived by others to be unpleasant (e.g., dominance smiles stemming from victory: van Osch et al., 2019), and some emotions that feel good to the experiencer could be predictive of action tendencies that are harmful to social relationships (e.g., self-aggrandizing nature of hubris: Wubben et al., 2021).

Beyond theoretical contributions, our findings may also hold applied value, particularly in the contexts from which we drew inspiration for our predictions. Positive psychology has gained traction in the sphere of popular culture, and there are folk movements postulating that feeling good and expressing our pleasant states openly is mostly beneficial for us (Ackerman, 2018). Our findings from Chapter 3 suggest a key caveat to this assumption, by pointing to the interactive roles of emotion specificity and social context in jointly shaping expressivity norms. Breaking these norms have concrete negative consequences for social life, and our findings from Chapter 4 reiterate the role of emotion specificity in determining what these ramifications may be. Even for emotions that are generally experienced to be pleasant, there are optimal levels of display that need to be adhered to. Our work aligns with and builds on past research conducted in both professional contexts and personal settings (Cheshin, 2020; Brescoll & Uhlmann, 2008; Grandey & Sayre, 2019), and thus provides a first step in better understanding how, when, and why positive emotional expressions are judged in the social world.

***Limitations and Future Directions: Studying Behavior across Cultures***

A central limitation of chapters 3 and 4 is that our findings are confined to data that is self-reported. Measuring display rules necessitates the use of intersubjective judgments given our definition (social norms of expression: Chiu et al., 2010; Gelfand et al., 2016), but behavioral measures would be useful for concretely demonstrating how display rules are applied in emotional situations (e.g., Kalokerinos et al., 2014). Some work has pointed to triumphant smiles being restrained at the point of victory (Hwang & Matsumoto, 2014) and using similar paradigms to contrast between emotions will provide richer and more nuanced information. For example, display rules for feeling moved may manifest through masking (e.g., hiding the face to not show one's tearful eyes), rather than suppression. Behavioral paradigms will also be useful for examining if the consequences of rule breaking will generalize beyond intentions. To achieve this, future research could coopt techniques that tap into social contact (e.g., how far away someone sits from a norm violator: Rudert et al., 2020) and power (e.g., if a norm violator would be elected to lead a group: Stamkou et al., 2019). Moving into the realm of behaviors will provide fresh insight into how display rules are applied, and what happens when they are broken.

A second limitation of these chapters relates to our reliance on predominantly WEIRD samples (for an elaborate discussion, see Henrich et al., 2010), which could explain why none of our examined positive emotions were considered outright unacceptable to express (e.g., display rules were generally reported to be below scale midpoints). The role of cultural values in shaping display rules cannot be discounted (for the original studies, see Ekman & Friesen, 1969), and it is certainly possible that in some cultures, very strong display rules exist for specific positive emotions. In contexts where relational harmony is highly prized (e.g., collectivistic east Asian societies: Kitayama et al., 2006), self-focused, agency signaling emotional expressions (e.g., triumph) could be seen as hurtful to interpersonal dynamics, and in these cultures, exaggerated displays of triumph could be met with even greater sanctions

than in the west (for similar arguments about anger displays, see Matsumoto et al., 2008). In high-masculinity contexts where emotional restraint is expected (e.g., stoic cultures such as Russia: Sheldon et al., 2017), emotional expressions that signal vulnerability (e.g., feeling moved) could have ramifications even in interpersonal settings, beyond existing purely as a cultural stereotype (which was the finding in our experiments with US respondents).

Studying the role of culture in relation to display rules and their violations is a potentially impactful line of future research, given the importance of emotional expressions to human communication (Hareli et al., 2015), and how it relates to the way people organize themselves based on what is considered functional in each society (see also Eriksson et al., 2021).

### **On the role of culture in emotional expressions**

Most emotion scholars would agree with the premise that culture shapes emotion to some degree, although the extent and manner in which culture matters is a point of contention (Scarantino et al., 2012). While basic emotion theorists view culture as an added layer of complexity built atop shared characteristics between human beings (Ekman & Cordaro, 2011), psychological constructionists instead postulate cultural learning to be central for acquiring and experiencing specific emotions (Russell, 2017). Both approaches have generated robust lines of research regarding cultural similarities and differences in emotion, and contradicting findings have intensified debates (Lindquist et al., 2013; Lench et al., 2013). It thus remains a useful endeavour to make sense of these divergent literatures by drawing them together and reconciling differences in a theoretically grounded manner.

We attempt to do so in Chapter 5, by suggesting a novel framework through which empirical findings can be organised and assessed. We take as a starting point the notion that emotions are multi-componential phenomena (Scherer & Moors, 2019) that constitute a variety of co-occurring segments (e.g., subjective experience, nonverbal expressions,

physiological reactions). The question of how much culture matters would be more fruitfully answered by addressing each component separately, and for this purpose we applied a hierarchical system of organising cultural universals (Norenzayan & Heine, 2005). This framework outlines four differing levels that are sequentially greater in terms of how universal a psychological concept is classified to be: nonuniversal (e.g., cultural invention), existential universal (e.g., available to most people), functional universal (e.g., serves a similar purpose across most cultures), and accessibility universal (e.g., equally elicited in most people, and no cultural moderation).

Findings on two components of emotion – subjective experience and nonverbal expressions – lead us to tentatively differing conclusions per component. The experience of positive emotions may be an existential universal. Emotion concepts exist in the minds of people from multiple cultures, such that they can self-report feeling pleasant. However, the functions served by positive emotions may diverge significantly between cultures (see Mesquita et al., 2017), meaning that the experience of positive emotions would not count as a functional universal. In contrast, the expression of emotions may instead be thought of as a functional universal. People across multiple cultures are relatively similar in the ways they produce (Cordaro et al., 2018) and perceive (Cowen et al., 2020) the expressions of at least some emotions, with a few caveats applied (e.g., recognition is greater within as compared to between cultures, known as the ingroup advantage: Elfenbein & Ambady, 2002). When they emerge, cultural differences tend to be quantitative rather than qualitative in nature (e.g., culture-specific patterns of expression co-occur with consistencies observed across groups: Keltner & Cordaro, 2017), further pointing to its classification as a functional universal. However, the elicitors of positive emotion may differ considerably between cultures even for emotions considered potentially basic (see Hwang et al., 2021), meaning that emotional expressions cannot be classified as accessibility universals.

Building on our theorising, we next sought to empirically test the hypothesis that specific positive emotions would be reported to be expressed in similar ways (at the level of communicative modalities) across multiple cultures. In Chapter 6, we applied an established method from cross-cultural psychology (intersubjective approach: Chiu et al., 2010) to systematically examine which channels are thought to be used for expressing four specific positive emotions, in 11 cultures that diverged in values and norms. Cross-culturally consistent findings were obtained, in addition to some culture-specific patterns of expression. Feeling moved was thought to be signaled with facial expressions, gratitude with the use of words, interest with words, face, and voice, and triumph with body posture, vocal cues, facial expressions, and words. Aligning with previous research, these findings are consistent with the proposal that the expression of specific positive emotions may indeed constitute a functional universal, at least at the level of reported communicative modalities.

**Conclusion III:** Positive emotion expressions may be functional universals (Chapter 5), such that cross-cultural consistencies are complemented by culture-specific patterns (Chapter 6).

***Implications: Degrees of Cultural Influence***

In essence, Chapters 5 and 6 suggest that positive emotional expressions may be functional universals, and thereby point to the degree to which culture shapes the expression of positive emotions. We suggest a theoretical framework through which scholars can concretely discuss the degrees of differences that are observed from empirical research. While our conclusions are tentative, the hope is to provide a common lexicon that affective scientists from varying theoretical backgrounds can utilize to engage in constructive exchanges with one another. Such theorizing could also be used to make more accurate and specific empirical predictions about the extent to which culture influences emotion, and one

might expect hypotheses to depend on which component of emotion is being evaluated, and perhaps even which emotion is being studied (e.g., whether an emotion may be tied to culturally specific situational elicitors: see the work on Amae, Niiya et al., 2006). We made one such attempt to examine how specific positive emotions are reported to be expressed, and our empirical findings aligned with most of our expectations. Together, these chapters add nuance to the discussion on culture and emotion, by illustrating that cultural differences and similarities are not necessarily juxtaposed concepts. While qualitative distinctions may emerge between cultures for some components of an emotion (e.g., emotion words: Lindquist, 2009), for others (e.g., emotional expressions), cultural differences and similarities seem to co-exist.

Beyond cross-cultural consistencies, our empirical results also point to potentially meaningful cultural specificities, particularly when viewed alongside a functionality framework (Sauter, 2017). In societies where kinship ties are fostered through reciprocity norms (e.g., India: Khatry et al., 2021), expressions of gratitude (an affiliative emotion: Nowak & Roch, 2007) are amplified through postural cues and touch, in combination with the use of words. Similarly, in cultures where achievement-orientation and assertiveness are valued (e.g., U.S.: Hwang et al., 2021), displays of triumph (an agency signaling emotion: App et al., 2011) involve clear communication through explicitly talking about one's competence, in addition to other nonverbal cues. Finally, in cultures where saving face is a particularly salient goal (e.g., China: see Mesquita et al., 1997), expressions of being moved (a high intensity emotion that signals being overwhelmed: Ven de Ven et al., 2017) are expressed with words in addition to some facial expression, possibly because display rules for facial behaviors are particularly stringent (e.g., compensatory use of verbal cues: see also Matsumoto et al., 2005). We incorporated existing theories from cultural psychology (Kitayama et al., 2006) and evolutionary psychology (Tooby & Cosmides, 2008) to interpret

our findings from self-reported data across a broad range of cultures. In so doing, we provide a roadmap to empirically test some of these meaningful cultural specificities in a focused way: within relevant cultural contexts, and by applying behavioral paradigms that distinguish between multiple expressive modalities.

***Limitations and Future Directions: Reasons for Consistencies and Differences***

A key limitation of these chapters was our focus on quantifying the degree of cultural differences, at the expense of directly probing why such differences may exist. Although we speculate about why these findings emerged, a fruitful next step would be to unpack the reasons that underpin both cultural similarities and divergences. Specifically in relation to positive emotional expressions, it was interesting to empirically observe the extent of consistency we obtained between the 11 surveyed cultures. Our samples were relatively dissimilar from each other in terms of values and norms. Nevertheless, it remains to be seen if similar results would emerge if we used a maximal differences approach: by surveying respondents in preliterate societies as well (e.g., Sauter et al., 2010). As a tentative explanation for the cross-cultural consistencies that were surfaced, we pointed to the role of socialization (Wang et al., 2015). For example, communicating gratitude has been suggested as a central tenet for maintaining social relationships particularly within group settings (Eibach et al., 2015), and this could potentially explain why words are used in multiple cultures (e.g., for clarity of expression: see Algoe et al., 2013). To empirically demonstrate the point on socialization, future research should consider adapting methods from developmental research. For example, by investigating how children (from varied backgrounds) are taught to express specific positive emotions, including by surveying their primary caregivers (for similar work on negative emotions, see Halberstadt et al., 2013). Socialization has the potential to be a key explainer for cultural consistencies in emotional expressions, and much further work is needed at this intersection for positive emotions.

A second limitation of these chapters relates to underlying explanations in relation to cultural differences. Display rules have often been suggested as a reason for cultural differences in expressions, but the empirical validity of this point has yet to be established. A concrete future direction would hence involve measuring expressivity norms for positive emotions across multiple cultures, and thereafter evaluating if cultural differences in reported rules indeed translate into behavioral distinctions in expressivity. An additional step involves charting out the relationships between display rules and other culturally relevant dimensions (e.g., collectivism: Matsumoto et al., 2008, homogeneity: Rychlowska et al., 2015), and evaluating their influences on expressive behaviors. We would expect findings to differ between specific positive emotions, depending on what the expressions are believed to signal within each cultural context. For example, the degree to which triumphant displays are perceived to communicate competence (deemed essential in assertiveness-valuing cultures: Hwang et al., 2021) versus conceitedness (likely in cultures where self-focused expressions are met with disapproval: Kitayama et al., 2000), should influence both display rules and actual expressions. Such research would shed light on the complex interplay between the web of factors (beyond display rules alone) that could in theory explain why cultural differences emerge for positive emotional expressions.

### **To conclude**

Showing others how we feel is a natural part of our everyday lives, and these expressions are not confined to unpleasant feelings. We express ourselves in a range of ways when we feel good: smiling when amused (Ambadar et al., 2009), sighing when relieved (Vlemincx et al., 2009), and cheering when triumphant (Tracy & Matsumoto, 2008). Positive emotional expressions are central to human functioning (Fredrickson, 2001), and a systematic understanding of how context (Greenaway et al., 2018) and culture (Kitayama et al., 2006) influence these expressions would hence be beneficial for both applied and theoretical



purposes (as elaborated in Keltner & Cowen, 2021). This dissertation responds to a call to arms to better understand the positive emotion space (see Shiota et al., 2017), and in so doing, provides answers to three related questions regarding positive emotional expressions: how specific positive emotions are spontaneously shown on the face, whether there are rules for displaying positive emotions and if so what the consequences of breaking them may be, and what the role of culture is in influencing positive emotional expressions. Our findings demonstrate that: (a) when produced spontaneously, many positive emotions are associated with specific sets of facial movements, (b) display rules differ between specific positive emotions, and the consequences of breaking these rules depend on which emotion is being expressed, (c) positive emotions are thought to be displayed in similar ways across cultures, but in addition there are culture-specific patterns of expression that can be meaningfully interpreted at the level of each positive emotion.

Taken together, this dissertation highlights the central role of emotion specificity in understanding expressions of feeling good. We are also excited to demonstrate the roles played by context and culture for positive emotional expressions. We hope that this work provides a set of findings that are of interest to affective scientists and social psychologists. We would be grateful if others view our work as a starting point for future research at this intersection, and a determined pursuit of paradigms that simultaneously involve culture and context would be an admirable next step.