

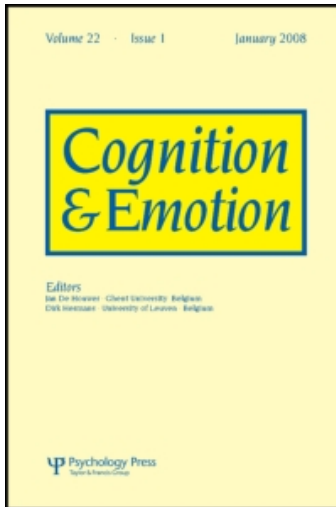
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Individual differences in emotion components and dynamics: Introduction to the Special Issue

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Contemporary emotion theories have come to conceptualise emotions as multi-componential and dynamic processes that do not necessarily cohere in fixed packages and continuously change over time. In this introduction to the Special Issue, we give a brief overview of what led to this conceptualisation of emotions, and propose how it can provide the key to our understanding of individual differences in emotional responding.

Keywords: Emotion; Individual differences; Emotion components; Emotion dynamics; Personality.

Psychologically speaking, emotions are a large part of what makes a person unique. People are endowed with variable genetic constitution and are exposed to different learning histories of threats and challenges, interpersonal relations, and life events. As a result of this idiographic history, each of us is characterised by a unique emotional life. Indeed, as noted by Davidson (1998) one of the most striking features of human emotions is the broad variability across individuals on many of the defining features of emotions, that is, the ways in which emotions are elicited, experienced, and expressed. Not as a coincidence, then, the field of personality research was built on these insights. Emotional dispositions are the core characteristics of such

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This Special Issue results from a symposium on “Emotions and Individual differences”, which was held at the University of Leuven between 30 May and 1 June 2007 and was sponsored by the Fund for Scientific Research-Flanders (FWO) and KULeuven Research Council Grant GOA/05/04. The first author of this contribution is a postdoctoral research fellow with the Fund for Scientific Research-Flanders (FWO).

personality dimensions as neuroticism, extraversion, psychoticism, sensation seeking, and so forth (e.g., Eysenck, 1970; Zuckerman, 1978). In a way, emotions make us individuals.

Early emotion theories, as put forward by Freud (1901/1960) and Bowlby (1988), started from the individual as the level of analysis. Each person's life experiences were considered to contribute to his emotional dispositions and sensitivities. Freud and Bowlby both emphasised the link between early childhood experiences and a person's emotional life. They described, each in their own manner, how experiences early in life constituted a person's emotional goals, concerns, competencies, etc. Thus, both Freud and Bowlby were interested in explaining what could be called the "gestalt" of an individual's emotional life: The totality of emotional sensitivities and habits and how they occur in interaction with the individual's idiosyncratic context, the intricate patterns of emotions in all their rich manifestations that characterised individuals' daily lives.

Emotion psychology has since taken a very different approach. For the most part, emotions were dissected one by one and individual differences in emotions were reduced to nomothetic, decontextualised traits. Rather than studying emotional life at the level of the individual and examining the myriad ways individuals can display variability therein, emotion researchers have tried to isolate bounded emotions, and study their dispositional occurrence and expression. The assumption of much of this research has been that emotions are static, monolithic entities. It has considered the core of emotions invariant. Therefore, individual differences into the dynamic processes that constitute an emotion itself disappeared to the background as an object of study. The study of individual differences in emotions from this perspective was thus distracting us from, rather than informing us about, the underlying mechanisms of emotions.

The aim of this Special Issue is to again dig deeper into the ways that individual differences in emotions emerge and make us individuals. The papers in this issue present theory and research about individual differences in emotions that start from the perspective of emotions as multicomponential and dynamic phenomena. The various contributions to this Special Issue illustrate how insight in the way emotions emerge in individuals is essential to the understanding of emotions generally and of their variation in constitution and dynamic unfolding across time. In the introduction to this Special Issue, we sketch the background against which the contemporary multicomponential and dynamical perspective on emotions has emerged and highlight some of the ways in which new approaches to emotions render the description and explanation of individual differences in all their richness and variation possible.

MONOLITHIC THEORIES TO ACCOUNT FOR INDIVIDUAL DIFFERENCES

Research on emotions was long guided by the idea that emotions are irreducible, perhaps even inborn, mechanisms (e.g., Ekman, 1984; Izard, 1977; Tomkins, 1984). Based on this idea, it was argued that there is a limited number of hardwired basic emotions such as fear, anger, sadness, joy, etc., that account for the realm of emotional experience. Common to this perspective was that these emotions are considered to be unitary phenomena that are characterised by relatively invariant patterns of prototypical eliciting circumstances and experiential, neurophysiological, and expressive components. Implied in this approach was also the idea that emotions are relatively static phenomena. Most research assumed that either one has an emotion or not, and that while having the emotion, the person is in a constant and uniform emotional state. As a result, research has primarily been concerned with identifying the antecedents and consequences of being in such particular constant emotional states of, say, fear, happiness, anger, or joy.

Personality theories and research on individual differences in emotion have mostly adopted this view of emotions as stable, invariant entities within the person. Most of the research in these domains has taken a nomothetic trait perspective, disregarding the contextualised nature of individual differences in personality and emotion (Kuppens, 2009; Mischel & Shoda, 1998). These constraints have led research to focus on so-called emotion traits (e.g., trait anger, trait anxiety, trait happiness), in which individuals are placed on continua that reflect their general tendency to experience certain emotions or affective states, and to examine the antecedent and consequent conditions of such dispositions. As such, this approach was impoverished compared to earlier perspectives such as Freud's and Bowlby's in which individual histories were thought to thoroughly affect the ways in which individuals experienced emotions. It is also impoverished compared to those older theories on individual differences, because emotional dispositions are represented as unidimensional (inclined to anger or not). The older approaches to individual differences were rather more complex, focusing on the gestalt of emotional experiences over time and contexts that characterises individuals.

As a result, the premises of the monolithic trait approaches have been challenged over the past decades. First, research adopting an appraisal perspective has suggested that emotions are not irreducible qualia, but rather can be reduced to a number of more fundamental emotional-relevant emotion components of evaluation (Ortony & Turner, 1990), as well as other action-related and physiological components. Furthermore, the assumed coherence among the different emotion components received less evidence than anticipated. Indeed, emotions do not typically occur as prototypical

patterns of experiential, neurophysiological, and expressive components (e.g., Barrett, Mesquita, Ochsner, & Gross, 2007; Kuppens, Van Mechelen, Smits, & De Boeck, 2003; Mauss, Levenson, McCarter, Wilhelm, & Gross, 2005; Mauss & Robinson, 2009; Niedenthal, Krauth-Gruber, & Ric, 2006; Reisenzein, 2000; Reisenzein, Bördgen, Holtbernd, & Matz, 2006; Russell, 2003). Finally, it has become clear that an emotion does not switch on, last for a while unaltered, and then switch off (Davidson, 2003; Koole, 2009; Scherer, 2000).

MULTICOMPONENTIAL AND DYNAMIC APPROACHES TO INDIVIDUAL DIFFERENCES IN EMOTIONS

As a result, static monolithic approaches to emotions are becoming more rare in the field of psychology. The majority of contemporary approaches to emotions takes a multicomponential and dynamical perspective, in which emotions are considered to consist of multiple components that do not necessarily cohere in fixed patterns and that dynamically evolve over time. Systematic individual differences are at the heart of these theories. First, the idea that emotional experience is constituted by appraisal has shifted the attention from the general nature of emotion elicitors (or “stressors”) to the subjective meanings (or appraisals) of certain circumstances. As a result, emotional experience is inherently subject to individual differences and is context specific, because each component of evaluation (or appraisal) implicates a judgement of the meaning of a particular situation as a function of an individual’s concerns, well-being and coping potential (e.g., Arnold, 1960; Frijda, 1986; Scherer, Schorr, & Johnstone, 2001; Smith & Lazarus, 1993). The latter can be thought of as reflecting an individual’s life-long experiences. In this way, appraisal theories have reintroduced the importance of an individual’s life history to emotions. Emotions always derive meaning from an individual’s representations, and these representations are based on an individual’s accumulated experiences.

Second, there is much intra- and interindividual variability in the patterning of responses of individual emotion components (such as core affect, appraisals, action tendencies, physiology). Each component tends to be continuously updated and regulated as a function of changes in both the context and the person, yielding a wide variety of ways and patterns in which emotional phenomena can manifest themselves within and across different individuals. According to this view, emotion components may proceed relatively independently from one another yet sometimes can combine to form the experience of, for instance, what one person would label “anger” under certain circumstances (e.g., Barrett et al., 2007). In other words, the

antecedents and configurations that make up the experience of certain emotions can differ across individuals, reflecting the simple fact that the situations that elicit my anger may be different from those that elicit your anger, and that my anger may be composed of different elements than your anger (e.g., Kuppens, Van Mechelen, Smits, De Boeck, & Ceulemans, 2007; Stouten, De Cremer, & Van Dijk, 2005). In essence, such combinations can occur in an infinite number of ways to produce finely nuanced emotional experiences and responses (Ellsworth & Scherer, 2003), going far beyond the combinations of a number of basic emotions.

Finally, these new approaches focus on the way emotion components and their constellations dynamically unfold over time and how the phenomenology and componential architecture of emotions fluctuates along with these changes (Lewis, 2005; Sander, Grandjean, & Scherer, 2005). Again, divergent dynamics of emotions across individuals are assumed to be the norm rather than the exception. People show sizeable individual differences in the duration of their emotions, both in normality (Verduyn, Delvaux, Van Coillie, Tuerlinckx, & Van Mechelen, 2009) and pathology (e.g., Tomarken & Keener, 1998; Whittle et al., 2008), in the variability of emotional intensity over time (Kuppens, Van Mechelen, Nezlek, Dossche, & Timmermans, 2007; Larsen, 1987), in the rate of affect repair (Hemenover, 2003), the degree of synchronicity that emotion components display over time (Mauss et al., 2005), and so on. An understanding of these divergent dynamics consists of revealing the ways and determinants of how specific emotion components occur and fluctuate, and how the outlook of the componential architecture (or interrelations between these components) is dependent on the person, on the situation, and on time. This emphasis on the natural course of emotions and the patterns that occur in daily life is also reminiscent of the initial approaches of individual differences (e.g., Freud, Bowlby) in which the gestalt of emotions in an individual's life was taken as the point of interest.

In all, these insights drive home the point that the key to understanding individual differences in human emotions and affective phenomena lies in unravelling and understanding their componential and dynamical nature. We believe that the field has entered a new chapter of the study of individual differences in emotion in which explicit attention is paid to individual differences in the componential architecture of emotions as well as their unfolding across contexts and time, and to the crucial dispositions and processes that underlie these differences. Such knowledge cannot only significantly advance our understanding of the processes and components that constitute emotions themselves, but can also shed light on the factors that are involved in the emotional dysfunctioning that lies at the heart of many psychopathological disorders.

FOCUS AND CONTENTS OF THIS SPECIAL ISSUE

The aim of this Special Issue is to bring together contributions on individual differences in emotion that start from the premise that emotions are to be conceptualised as multicomponential and dynamic processes. By doing so, we hope to bring this multicomponential and dynamic nature of emotions right into the spotlight of emotion research, and present contributions that significantly advance our understanding of individual differences in emotions in all their richness and variations.

In a first part of the Special Issue, we sample three theoretical contributions that describe emotions as flexible multicomponential and dynamical processes with clear implications for the understanding of individual differences. The first contribution by Russell presents a theoretical case for conceptualising emotions as psychological constructions of loosely coupled multicomponential processes. In his view, there are no causal entities underlying emotions such as fear, anger, and happiness, but these experiences reflect psychological categorisations of core affect in combination with other emotion components that occur as they adjust to internal and external events, rather than being caused by a central fear- or anger-eliciting mechanism. The task ahead, according to Russell, therefore lies in examining the components and their associations, and how they are subject to individual differences.

Next, Barrett takes as a starting point the wide variety in emotional life. After reviewing how different theoretical paradigms have dealt with this variety she also elaborates on a psychological constructionist approach for explaining mental events: the conceptual act model. This model assigns a central role to categorisation in how an individual gives meaning to the richness and diversity of internal states. Barrett offers insights into how this shapes individual differences in emotions and offers a number of hypotheses about the nature of emotion that follow from this model.

Finally, Scherer also emphasises the flexible nature of emotions, but his theoretical focus is different. He discusses the sequential nature of the component process model, which suggests that there is a recursive appraisal process with a fixed sequence of appraisal checks, and provides the most recent evidence for this sequential and dynamic processing from behavioural, psychophysiological, and neuroscience studies. Like the two previous contributions, he emphasises the resulting variability in emotional life, but, at the same time, unlike to the two previous approaches, postulates patterned componential processes to underlie emotional experiences. In addition, he provides specific indications for identifying and understanding the most prominent sources of individual differences in emotional responding, both in the normal and pathological range of variation.

As is clear from these contributions, individual differences in emotional responding emerge from differences between people both in how individual components occur and change across time, as well as in the mutual relationships and patterns between emotion components. In line with this, Kuppens and colleagues recently argued from an appraisal perspective that there are two basic sources for individual differences in emotional experience: (1) differences in how people appraise their circumstances; and (2) differences in how appraisals or patterns of appraisal components relate to specific emotional experiences (Kuppens, Van Mechelen, & Rijmen, 2008). Therefore, the challenge for advancing our knowledge on individual variation in emotion lies in revealing the processes underlying both types of differences, and the next set of contributions to the Special Issue are dedicated to addressing this challenge. Smith and Kirby address the first source of individual differences. They present the relational model for appraisal components as a framework to explain individual differences in how people appraise their circumstances from the interaction between dispositional and contextual factors. They review their empirical assessments of the relational models for three distinct components of emotion-antecedent appraisal: motivational relevance, problem-focused coping potential, and emotion-focused coping potential and identify the factors that contribute to them.

Subsequently, both Van Mechelen and Hennes and Silvia, Henson, and Templin address the second source of individual differences. They each present empirical evidence for individual differences in the associations between appraisal components and the experience of specific emotions. Van Mechelen and Hennes report a diary study on the associations between various anger appraisals and the experience of anger. The data are analysed in terms of necessity and joint sufficiency of such appraisals for anger, and in terms of how individuals differ in their anger as a function of the presence and absence of particular anger appraisals and how these differences relate to personality dispositions. Silvia et al. focus on the emotion of interest and likewise observe individual differences in the relationships between the experience of emotion and its constituent appraisal components as a function of dispositional traits. Combined, these studies emphasise the importance of considering the variable nature of emotion component interrelations (subjective experience and appraisals), and shed light on how the componential architecture of anger and interest varies across individuals.

Finally, two contributions directly address individual differences in the temporal dynamics of emotions. First, Larsen, Augustine, and Prizmic present a dynamic process model of intraindividual changes in emotions and moods and elaborate on how both within- and between-individual differences in temporal emotion processes can be conceptualised. They provide an

accessible method to study the idiosyncrasies of dynamic emotional lives of individuals, which brings the person back centre stage in emotion research. Second, Verduyn, Van Mechelen, Tuerlinckx, Meers, and Van Coillie focus on within-person changes in emotional intensity and empirically examine individual differences in the intensity profiles of emotional episodes. They identify the typical intensity profiles of particular emotions and investigate how the course of emotional intensity for these emotions may vary across individuals and across different emotions. Their contribution thus provides an empirical window on the temporal unfolding of emotional episodes.

In conclusion, Frijda provides a thoughtful integration by reflecting from his perspective on the merits and demerits, promises and pitfalls of the different contributions. Throughout, he generously discusses the opportunities and challenges that await future emotion research that conceptualises emotions as dynamic and componential phenomena.

We hope that this Special Issue will provide an impetus for future emotion research on individual differences in emotions. It is our belief that insight in the ways emotions vary across persons is conditional to the understanding of what causes, constitutes, and fluctuates in emotional phenomena. Only by generalising the ways in which individuals differ with respect to emotions, will we be able to understand the general laws of emotion.

REFERENCES

- Arnold, M. B. (1960). *Emotion and personality*. New York: Columbia University Press.
- Barrett, L. F., Mesquita, B., Ochsner, K. N., & Gross, J. J. (2007). The experience of emotion. *Annual Review of Psychology, 58*, 373–403.
- Bowlby, J. (1988). *A secure base: Parent–child attachment and healthy human development*. New York: Basic Books.
- Davidson, R. J. (1998). Affective style and affective disorders: Perspectives from affective neuroscience. *Cognition and Emotion, 12*, 307–330.
- Davidson, R. J. (2003). Darwin and the neural bases of emotion and affective style. *Annals of the New York Academy of Sciences, 1000*, 316–336.
- Ekman, P. (1984). Expression and the nature of emotion. In K. R. Scherer & P. Ekman (Eds.), *Approaches to emotion* (pp. 319–344). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Ellsworth, P. C., & Scherer, K. R. (2003). Appraisal processes in emotion. In R. J. Davidson, H. Goldsmith, & K. R. Scherer (Eds.), *Handbook of affective sciences* (pp. 572–595). New York: Oxford University Press.
- Eysenck, H. J. (1970). *The structure of human personality*. London: Methuen.
- Freud, S. (1960). The psychopathology of everyday life. In Volume VI of James Strachey (Ed.), *The standard edition of the complete psychological works of Sigmund Freud*. London: Hogarth. (Originally published 1901)
- Frijda, N. H. (1986). *The emotions*. Cambridge: Cambridge University Press.

- Hemenover, S. H. (2003). Individual differences in rate of affect change: Studies in affective chronometry. *Journal of Personality and Social Psychology*, 85, 121–131.
- Izard, C. E. (1977). *Human emotions*. New York: Plenum Press.
- Koole, S. L. (2009). The psychology of emotion regulation: An integrative review. *Cognition and Emotion*, 23, 4–41.
- Kuppens, P. (2009). The legacy of the person–situation debate for understanding variability in emotional experience. *Journal of Research in Personality*, 43, 255–256.
- Kuppens, P., Van Mechelen, I., Nezlek, J. B., Dossche, D., & Timmermans, T. (2007). Individual differences in core affect variability and their relationship to personality and adjustment. *Emotion*, 7, 262–274.
- Kuppens, P., Van Mechelen, I., & Rijmen, F. (2008). Towards disentangling sources of individual differences in appraisal and anger. *Journal of Personality*, 76, 969–1000.
- Kuppens, P., Van Mechelen, I., Smits, D. J. M., & De Boeck, P. (2003). The appraisal basis of anger: Specificity, necessity and sufficiency of components. *Emotion*, 3, 254–269.
- Kuppens, P., Van Mechelen, I., Smits, D. J. M., De Boeck, P., & Ceulemans, E. (2007). Individual differences in patterns of appraisal and anger experience. *Cognition and Emotion*, 21, 689–713.
- Larsen, R. J. (1987). The stability of mood variability: A spectral analytic approach to daily mood assessments. *Journal of Personality and Social Psychology*, 52, 1195–1204.
- Lewis, M. D. (2005). Bridging emotion theory and neurobiology through dynamic modeling. *Behavioral and Brain Sciences*, 28, 169–245.
- Mauss, I. B., Levenson, R. W., McCarter, L., Wilhelm, F. H., & Gross, J. J. (2005). The tie that binds? Coherence among emotion experience, behavior, and physiology. *Emotion*, 5, 175–190.
- Mauss, I. B., & Robinson, M. D. (2009). Measures of emotion: A review. *Cognition and Emotion*, 23, 209–237.
- Mischel, W., & Shoda, Y. (1998). Reconciling processing dynamics and personality dispositions. *Annual Review of Psychology*, 49, 229–258.
- Niedenthal, P. M., Krauth-Gruber, S., & Ric, F. (2006). *Psychology of emotion. Interpersonal, experiential, and cognitive approaches*. New York: Psychology Press.
- Ortony, A., & Turner, T. J. (1990). What's basic about basic emotions? *Psychological Review*, 97, 315–331.
- Reisenzein, R. (2000). Exploring the strength of association between the components of emotion syndromes: The case of surprise. *Cognition and Emotion*, 14, 1–38.
- Reisenzein, R., Bördgen, S., Holtbernd, T., & Matz, D. (2006). Evidence for strong dissociation between emotion and facial displays: The case of surprise. *Journal of Personality and Social Psychology*, 91, 295–315.
- Russell, J. A. (2003). Core affect and the psychological construction of emotion. *Psychological Review*, 110, 145–172.
- Sander, D., Grandjean, D., & Scherer, K. R. (2005). A systems approach to appraisal mechanisms in emotion. *Neural Networks*, 18, 317–352.
- Scherer, K. R. (2000). Emotions as episodes of subsystem synchronization driven by nonlinear appraisal processes. In M. D. Lewis & I. Granic (Eds.), *Emotion, development, and self-organization: Dynamic systems approaches to emotional development* (pp. 70–99). New York: Cambridge University Press.
- Scherer, K. R., Schorr, A., & Johnstone, T. (2001). *Appraisal processes in emotion: Theory, Methods, Research*. New York: Oxford University Press.
- Smith, C. A., & Lazarus, R. S. (1993). Appraisal components, core relational themes, and the emotions. *Cognition and Emotion*, 7, 233–269.

- Stouten, J., De Cremer, D., & Van Dijk, E. (2005). All is well that ends well, at least for proselves: Emotional reactions to equality violation as a function of social value orientation. *European Journal of Social Psychology, 35*, 767–783.
- Tomarken, A. J., & Keener, A. D. (1998). Frontal brain asymmetry and depression: A self-regulatory perspective. *Cognition and Emotion, 12*, 387–420.
- Tomkins, S. S. (1984). Affect theory. In K. R. Scherer & P. Ekman (Eds.), *Approaches to emotion* (pp. 163–195). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Verduyn, P., Delvaux, E., Van Coillie, H., Tuerlinckx, F., & Van Mechelen, I. (2009). Predicting the duration of emotional experience: Two experience sampling studies. *Emotion, 9*, 83–91.
- Whittle, S., Yap, M. B. H., Yücel, M., Fornito, A., Simmons, J. G., Barrett, A., et al. (2008). Prefrontal and amygdala volumes are related to adolescents' affective behaviors during parent-adolescent interactions. *Proceedings of the National Academy of Sciences, 105*, 3652–3657.
- Zuckerman, M. (1978). Sensation seeking. In H. London & J. E. Exner (Eds.), *Dimensions of personality* (pp. 487–559). New York: Wiley.