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The Concept of "Metaemotion": What is There to Learn From Research on Metacognition?

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Abstract

We first present a selection of vignette examples from empirical psychological research to illustrate how the phenomenon of metaemotion (Gottman, Katz, & Hooven, 1996; Mendonça, 2013) is studied within different domains of psychology. We then present a theoretical distinction which has been made between three facets of metacognition, namely metacognitive experiences, metacognitive knowledge, and metacognitive strategies (e.g., Efklides, 2008; Flavell, 1979). Referring back to the vignette examples from metaemotion research, we argue that a similar distinction can be drawn between three facets of metaemotion, namely metaemotional experiences, metaemotional knowledge, and metaemotional strategies. We argue that this distinction clarifies some of the unresolved issues in metaemotion research, and therefore has important implications for the study of metaemotion, both methodologically and theoretically.

Keywords
experience, knowledge, metaemotion, strategies

The concept of "metaemotion" was first introduced by Gottman et al. (1996) within family therapy research. They claimed that parents differ with respect to the way they feel and think about their own and their children's emotions, which in turn affects the way they approach emotions in everyday life. This organized set of feelings and thoughts about emotions was referred to as "metaemotional philosophy." Gottman et al. demonstrated that various outcome variables in middle childhood (e.g., academic achievement) were related to the metaemotional philosophy of parents.

Since then, the concept has been adopted and explored further by researchers within both philosophy and psychology. An overview of a philosophical perspective on metaemotion is provided by Mendonça (2013). Within psychology, metaemotion has been the focus of interest in a variety of different subdisciplines, including personality psychology (Mitmansgruber, Beck, Höfer, & Schüßler, 2009), media psychology (Bartsch, Appel, & Storch, 2010; Bartsch, Vorderer, Mangold, & Viehoff, 2008), decision making (Koven, 2011), and clinical psychology (Shaver, Veilleux, & Ham, 2013), which will be exemplified next. As will be illustrated in what follows, there is to date no consensus across psychological disciplines with regard to how metaemotion is defined, beyond the general agreement that metaemotions involve "emotions about emotions."

Gottman et al. (1996) pointed to the parallel between metaemotion, "emotion about emotion," and metacognition, "cognition about cognition," in that they are involved in the executive control of emotion and cognition, respectively. However, few attempts have been made to explicitly draw parallels between the two research areas. Our aim is to show how distinctions made within metacognition research may be usefully applied to metaemotion research, in order to clarify the concept of metaemotion further. A larger consensus on how metaemotion could be defined and what components it may consist of would make it easier to compare and combine findings across different studies, and may provide a starting point for developing a broader theoretical model of metaemotion. In addition, a clarification of the concept of metaemotion may broaden the potential range of measures by which it can be assessed.

It should be noted that metaemotion is closely related to "meta-mood" (Mayer & Gaschke, 1988). While metaemotion refers to "emotions about emotions," "meta-mood" has been defined as a reflective process that accompanies mood states, more specifically, an "ongoing process associated with moods whereby individuals continually reflect upon their feelings,

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monitoring, evaluating, and regulating them" (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995, p. 127). At face value, the main difference between meta-mood and metaemotion is whether the primary event is a mood or an emotion, that is, the state's duration, strength, antecedent event, and behavioural/physiological correlates. However, the difference between meta-mood and metaemotion as it is treated in the literature is not always clear. For example some self-report items used to assess meta-mood are in fact concerned with emotions (e.g., the Trait Meta-Mood Scale item "I never give in to my emotions"; Salovey et al., 1995). Thus many of the points raised in this article would therefore also apply to research on meta-mood. Nevertheless, the differences between meta-mood and metaemotion should be discussed and studied further in the future.

Some Central Properties of Metaemotion

In a review of some central psychological and philosophical articles on metaemotion, Mendonça (2013) points to a central property of metaemotion that qualifies it as a separate and distinguishable concept within emotion theory. This property is reflexivitiy, that is, that the experience of a metaemotion may have an impact on the first-order emotion, which may in turn change the meaning of the emotional experience itself. One example is when a "blush of embarrassment may be intensified by embarrassment over the blush" (Feagin, 1983, p. 97). Importantly, Mendonça points out that when parents and teachers educate children about emotions this will necessarily have to occur through reflections about metaemotion. Mendonça also addresses some unresolved questions in metaemotion research, for instance whether there are limits to the number of layers of metaemotion (e.g., is it meaningful to talk about an emotion about an emotion about an emotion?), the extent to which the phenomenology of emotion and metaemotion can be understood separately, whether certain types of emotion can only occur at a certain level, and whether metaemotions are generally veridical.

Mendonça (2013), who represents a philosophical tradition, points to the need for more research on metaemotion, including a more precise clarification of the concept and how it relates to neighbouring phenomena. In the following, we first present a small selection of empirical research on metaemotion taken from different psychological subdisciplines. The aim is to exemplify how metaemotion has been defined and measured within different studies, and to show how metaemotion has been found to predict various outcome variables. Moreover, this section is intended to show that the clarifications requested by Mendonça are also clearly needed within empirical psychological research on metaemotion. We then turn to a different psychological research area, namely metacognition research. Our intention is to show how theoretical distinctions drawn within this area can be transferred to metaemotion research in order to more precisely clarify the concept. In our opinion, this would be useful both from a theoretical and from an applied empirical standpoint.

Studies and Definitions of Metaemotion: Some Examples

Mitmansgruber et al. (2009) broadly define metaemotion as emotional reactions about one's "emotional self." They claim that metaemotion has a regulatory function, and that its phenomenological quality (e.g., anxiety, anger, compassion) reflects qualities of self-regulation, for example, its associated motivation and action tendency. In a nonclinical sample they found that individual differences in metaemotion predicted subjective well-being over and above the related variables trait mindfulness and experiential avoidance. In this study, metaemotion was measured with the Meta-Emotion Scale, a self-report questionnaire assessing six components of metaemotion (anger, compassionate care, interest, contempt/shame, thought control, and suppression).

According to Bartsch et al. (2010), metaemotions are emotions that have other emotions as their appraisal object. They are related to "concerns beyond the scope of the primary emotion" and involve "affective reactions toward the primary emotion, and motivation to change the expected course of the primary emotion" (Bartsch et al., 2008, p. 16). In a field study among moviegoers who watched drama or horror films (Bartsch et al., 2010), stable individual differences in metaemotion, which could be referred to as "trait" metaemotion, were measured by the Need For Affect Scale (Maio & Esses, 2001). This scale consists of two dimensions, namely the tendency to approach versus avoid emotions. Primary emotions elicited by the movies, and emotions about current primary emotions, which could be referred to as "state" metaemotions, were both assessed with self-report questionnaires. Two factors in state metaemotion were identified—metaemotion enjoyment (e.g., "I like this feeling") and metaemotion normative appreciation (e.g., "I find these feelings embarrassing"). Need for affect scores predicted the intensity, valence, and ambivalence of primary emotions, and differences in state metaemotions: high need for affect avoidance predicted lower metaemotion enjoyment and normative appreciation, whereas higher need for affect approach predicted a higher tendency to view one's emotions as normatively adequate. The only effect of movie type (drama vs. horror) was that drama movies were associated with more negative emotion.

Koven's (2011) study is concerned with utilitarian reasoning, that is, "in which action for the good of many is tantamount even at the expense of the good of one." The hypothesis is that the tendency to make utilitarian decisions, assumed to require cognitive control of emotion, is related to individual differences in metaemotion. Metaemotion is here regarded as a set of strategies relevant for using emotional information adaptively, including "the ability to pay attention to emotions, discriminate among emotions, verbally label emotions, and regulate emotions" (Koven, 2011, p. 1256). Utilitarian decision making was assessed by presentation of "high-conflict" personal moral dilemmas concerning "whether it is appropriate to harm one individual in order to save the lives of several individuals" (p. 1256). Individual differences in metaemotion were measured by the Toronto Alexithymia Scale (Taylor, Bagby, & Parker, 1997),

the Trait Meta-Mood Scale (Salovey et al., 1995), and the Mood Awareness Scale (Swinkles & Giuliano, 1995). A factor analysis identified that questionnaire items could be grouped into two factors—clarity of emotion and attention to emotion. Utilitarian decision making was negatively related to clarity of emotion, indicating that high clarity of emotion may imply longer lasting emotional reactions to negative stimuli (e.g., "high-conflict" moral dilemmas), which may impair cognitive control.

Shaver et al. (2013) hypothesize that differences in metaemotion may partly explain individual differences in the tendency to "drink to cope." Metaemotion is seen as a form of emotion where the appraisal object is "any of the several components that comprise a given primary emotional reaction" (Shaver et al., 2013, p. 1020), that is, may potentially occur in response to an emotion's physiological changes, expressive actions, behavioural urges, or subjective feelings. They studied two forms of metaemotion, (a) anxiety sensitivity, that is, being anxious about physiological and expressive components of anxiety, measured by the Anxiety Sensitivity Index (Taylor et al., 2007), and (b) nonacceptance, that is, difficulty in accepting one's negative emotions, measured by the Non-Acceptance subscale of the Difficulties in Emotion Regulation Scale (Gratz & Roemer, 2004). Drinking to cope was predicted by trait negative affect and trait anxiety, but not by the two forms of metaemotion. However, they were both associated with trait anxiety, and nonacceptance was associated with increased negative affect.

These examples illustrate that metaemotion is considered a predictor of various indices of well-being and mental health. They also show that different subdisciplines of psychology share the same basic understanding of the phenomenon. The general view that metaemotion is an emotion that has other emotional phenomena as an appraisal object is explicitly stated by Mitmansgruber et al. (2009), Bartsch et al., (2010), and Shaver et al. (2013), and is also implied in Koven (2011). However they also illustrate inconsistencies in the way metaemotion is specifically operationalized across studies: For instance, one question is whether metaemotion should be seen as an emotion in its proper sense—that is, a multifaceted phenomenon with cognitive, phenomenological, motivational, physiological, and behavioural correlates, or as a self-regulation mechanism. Furthermore, if metaemotions differ from emotions in terms of their appraisal object, is the appraisal object an emotion per se (as Bartsch et al. [2010] seem to indicate), or could any individual component of an emotion constitute such an appraisal object (as Shaver et al. [2013] suggests)? It is also unclear whether and to what extent various suggested subcomponents of metaemotion overlap, for example, attention to emotion (Koven, 2011) versus interest (Mitmansgruber et al., 2009), and contempt/shame (Mitmansgruber et al., 2009) versus nonacceptance (Shaver et al., 2013).

Metacognition and Its Facets

Even though Gottman et al. (1996) explicitly compared metaemotion to metacognition, a systematic comparison of the two concepts seems still to be lacking. Metacognition broadly refers to "cognition about one's own cognition," and is assumed to be involved in monitoring and control of ongoing cognition (Nelson & Narens, 1990). Metacognition can be operationalized and measured in a number of different ways (see Tarricone, 2011, for a comprehensive overview). The following discussion will be based on a broad and widely acknowledged distinction between three facets of metacognition.

The distinction between metacognitive experience, metacognitive knowledge, and metacognitive strategies originates from Flavell (1979). He defined *metacognitive experiences* as "any conscious cognitive or affective experiences that accompany and pertain to any intellectual enterprise" (Flavell, 1979, p. 906). Importantly, they are experienced (and often reported) during a cognitive activity, for example, "feelings-of-knowing" in memory situations. Metacognitive experiences can be subdivided into information-based metacognitive judgements and experience-based metacognitive feelings (Koriat, 2007; Norman, Price, & Duff, 2010), depending on whether the experience occurs in relation to explicit/conscious or implicit/unconscious cognitive activity. *Metacognitive knowledge* is "that segment of your … stored world knowledge that has to do with people as cognitive creatures and with their diverse cognitive tasks, goals, actions, and experiences" (Flavell, 1979, p. 906). It includes declarative beliefs about one's own cognitive processes and the factors that influence specific cognitive processes and their outcome, for example, knowledge about the effect of rehearsal on memory. Metacognitive knowledge can be further subdivided according to whether the knowledge concerns oneself, others, task-specific knowledge, or one's possession of cognitive strategies (Dunlosky & Metcalfe, 2009; Efklides, 2008; Flavell, 1979). It should be noted that Flavell (1979) pointed to the potential overlap between metacognitive knowledge and experience, in that "Some experiences have such knowledge as their content and some do not; some knowledge may become conscious and comprise such experiences and some may never do so" (Flavell, 1979, p. 908). *Metacognitive strategies* are strategies that the individual engages in with the aim of controlling cognitive processes—the "deliberate use of strategies (i.e., procedural knowledge) in order to control cognition" (Efklides, 2008, p. 280). Flavell (1979) used the term actions/strategies to refer to this form of metacognition. Even though he classified it as a separate metacognitive entity, he emphasized that it differed from knowledge/experience only in content and function, not in form or quality, and therefore could also be seen as a variety of metacognitive knowledge. It should be noted that Flavell (1979) also included "metacognitive goals/tasks" as a fourth form of metacognition. However, since this is not commonly acknowledged as a separate metacognitive facet (see, e.g., Efklides, 2008), and because it is less applicable to the area of metaemotion, we have not included this possible facet in our discussion.

Three Facets of Metaemotion?

As an attempt to clarify and attune a more precise definition of metaemotion, we propose that the metaemotion phenomenon as

a general construct can be understood in terms of the interplay between three different classes of phenomena that correspond to three facets of metacognition presented before. It should be noted that although an in-depth understanding of metaemotion requires that all three proposed facets are taken into account, individual facets can in principle be targeted separately.

Metaemotional Experiences

Metaemotion is often described as a "meta-level" experience in ongoing emotional experience, with its phenomenological qualities being as differentiated as those of primary emotional experience. As pointed out by Shaver et al. (2013), the phenomenology of metaemotions may include feelings of anger, sadness, embarrassment, shame, anxiety, etc. The "raw feel", or subjective component of metaemotions, not necessarily accessible to conscious introspection or control, may be seen as corresponding to metacognitive experiences and be labelled metaemotional experiences. The concepts of metaemotion enjoyment (e.g., "I like this feeling") and metaemotion normative appreciation (e.g., "I find these feelings embarrassing"; Bartsch et al., 2010) seem to reflect this aspect of metaemotion. The Anxiety Sensitivity Index used by Shaver et al. (2013) also seems to address the subjective reaction associated with the experience of anxiety, for example, whether one feels scared, embarrassed, or worried. Moreover, the Non-Acceptance subscale of the Difficulties in Emotion Regulation Scale (Shaver et al., 2013) contains items that primarily seem to reflect metaemotional experiences (e.g., "I experience my emotions as overwhelming and out of control").

Even though we describe metaemotional experiences as emotional by nature, they may sometimes be accompanied by cognitive experiences. For example, a father who gets angry with his child may metaemotionally feel sad that he reacted in this way. In addition, he may also reflect upon why he reacted with anger in this particular situation. This situation cannot purely be understood as a case of "emotion about emotion" but also as "cognition about emotion," thus the distinction between metaemotional and cognitive experience is not always clear-cut.[1]

Metaemotional Knowledge

Gottman et al. (1996) distinguished between parents' "metaemotion philosophy" and their actual way of approaching their own and their children's emotions. An organized set of thoughts about emotions seems parallel to metacognitive knowledge, which refers to people's declarative knowledge about cognitive processes. One suggestion would therefore be to categorize this form of metaemotion as metaemotional knowledge. Declarative metacognitive knowledge can further be subdivided into different knowledge areas, for example, between knowledge of self and others, and knowledge of task and context (Tarricone, 2011). The latter could for instance refer to knowledge of human memory and the situational and behavioural factors that may influence a person's memory. A similar subdivision of declarative metaemotional knowledge could be made between knowledge of one's own and others' emotions, general knowledge about emotions, knowledge about specific emotions, and knowledge about situational and behavioural factors that may influence a person's emotions.

Some of the items in the self-report scales referred to earlier concern the individual's degree of insight/knowledge into their own patterns of emotional reactions, their tendency to regard emotions as useful information source, and to label and make use of this information. In other words, they all reflect various forms of metaemotional knowledge. Such items include those of Mitmansgruber et al.'s (2009) subscales that concern people's tendency to react with anger to their emotions (e.g., "I repeatedly get angry about my emotional reactions"), The Non-Acceptance subscale of the Difficulties in Emotion Regulation Scale (e.g., "When I'm upset, I acknowledge my emotions") used by Shaver et al. (2013), and items that load on Koven's (2011) factors attention to emotion and clarity of emotion (e.g., the Toronto Alexithymia Scale item "I find examinations of my feelings useful in solving personal problems"). When Mendonça (2013) claims that metaemotions are influenced by the person's values and beliefs, this can also be understood as a case of metaemotional knowledge. Furthermore, Mendonça (2013) provides a series of examples of situations where teachers and parents communicate knowledge about patterns of emotional experiences to children. For example, they may teach and give children feedback about the duration and progression of emotions, and which emotions are appropriate or normal in a given situation. Mendonça's examples concerning the education of emotion all seem to reflect different subtypes of metaemotional knowledge.

Metaemotional Strategies

Several authors address the control/regulatory function of metaemotions. According to Bartsch et al. (2008), metaemotion may play a role in those forms of emotional self-regulation that attempt to change the emotion itself. In discussing metaemotion and reflexivity, Mendonça (2013) also addresses the regulatory aspect of metaemotions. This aspect of metaemotions can be seen as parallel to the concept of metacognitive strategies, and could be labelled metaemotional strategies. The Meta-Emotion Scale's (Mitmansgruber et al., 2009) subscales thought control (e.g., "I repeatedly force myself to pull myself together") and suppression (e.g., "I cannot come to grips with strong emotions"), and the Trait Meta-Mood Scale Mood Repair subscale all concern the ability to regulate one's emotions. Similarly, some Toronto Alexithymia Scale items, like "I am able to describe my feelings easily" also seem to reflect this form of metaemotion. It could also be argued that some of the scales and items reflecting the ability to make use of emotional information, categorized before under metaemotional knowledge, are concerned with the person's metacognitive insight into a metaemotional strategy. This illustrates that metaemotional knowledge and strategies are closely related, as is also the case for metacognitive knowledge and strategies (Flavell, 1979).

In some cases, metaemotional self-regulation involves the regulation of ongoing emotions. For example, if a sudden strike of anxiety triggers negative metaemotional experiences (e.g., being anxious of one's ongoing anxiety), one may attempt to alleviate the primary emotion by distracting oneself from the object or situation that triggered it, or by mechanisms like reappraisal or suppression. Here, metaemotional strategies involve the application of strategies for the control of current emotion. However metaemotional self-regulation may sometimes occur at a more superordinate level. First, they may relate to the prediction and control of future emotions (e.g., being anxious about one's future anxiety). Second, they may involve identification of current emotions, monitoring of changes in one's emotional state, planning of strategies to be applied later, regulating one's emotions in case they deviate from predicted emotions, and evaluating the outcome of emotional regulation attempts.[2]

The Relationship Between the Three Proposed Facets of Metaemotion

Although we propose that the three facets of metaemotion can be theoretically distinguished and operationalized independently of one another, it is also important to keep in mind that they are, to some extent, mutually dependent. For instance, Mitmansgruber et al. (2009) argue that the quality of metaemotion provides information about regulatory processes operating on the target emotion—for example, being angry about one's anxiety may influence the experience of the primary anxiety and lead to attempts to alleviate it. This is different from experiencing compassion about anxiety. Here metaemotional experiences (of, e.g., anxiety or compassion) seem to influence the application of metaemotional strategies (e.g., attempting to alleviate anxiety). In addition, both the phenomenal quality of the metaemotion and which regulatory metaemotional strategies are initiated, may be influenced by metacognitive knowledge of, for example, whether it would be appropriate/normal to experience and express anxiety in the given situation. Mendonça (2013) also presents an interesting example where awareness of metaemotion can reduce interpersonal conflict by helping people to shift perspective and take on a more collaborative attitude. This could be seen as a case where introspection on metaemotional experience may generalize or transform to metaemotional knowledge, which in turn influences the person's metaemotional strategies.

The relationship between these three facets can also be illustrated by an example from research on affective forecasting, that is, prediction of future emotional states (Wilson & Gilbert, 2003). Affective forecasting per se could be regarded as the application of metaemotional knowledge, that is, assumptions or knowledge about one's own and others' emotional reactions. However, it has also been shown that the impact bias in affective forecasting is influenced by individual differences in a trait mindfulness facet concerned with the ability to observe one's emotion (Emanuel, Updegraff, Kalmbach, & Ciesla, 2010). This could be seen as a metaemotional strategy that concerns the ability to accurately identify metaemotional experiences.

Metaemotion: Trait or State?

In the previous presentation of metaemotional experience, knowledge, and strategies we have not directly specified whether we regard each of these as state or trait variables. For example, the metaemotional experience of being angry at one's anxiety may be seen as a state variable in the sense that it refers to a short-lived psychological state that has a specific precursor. However, the tendency to react to one's anxiety with anger may be influenced by more stable individual differences. Thus, metaemotional experiences cannot straightforwardly be classified as either a state or trait variable, and may best be seen as a combination of both. The same applies to metaemotional strategies and metaemotional knowledge, where "trait" refers to the potential availability of certain metaemotional strategies or knowledge, and "state" refers to whether or not a potentially available strategy or potentially available metaemotional knowledge, respectively, is applied in a given situation. For example, the metaemotional self-control strategy reflected on items like "I repeatedly force myself to pull myself together" may be seen as a trait variable because it refers to a relatively stable self-regulatory mechanism. However, although in possession of such strategies, one can imagine cases where people are not able to activate/use them due to the context surrounding a given situation, see the work of Baumeister and colleagues on self-control depletion (Baumeister, Vohs, & Tice, 2007; Muraven & Baumeister, 2000).

Metaemotion Versus Emotional Intelligence

This view of metaemotion as involving both state and trait properties makes it different from the related concept of emotional intelligence, which has been measured using some of the same self-report scales, and which has also been divided into subcomponents that have some resemblance with the suggested facets of metaemotion. For instance, the Trait Meta-Mood Scale (Salovey et al., 1995) and the Toronto Alexithymia Scale (Taylor et al., 1997), have been used to measure both metaemotion and emotional intelligence, and the emotional intelligence branch "Managing emotions so as to attain specific goals" (Mayer, Salovey, & Caruso, 2008) has some similarity to the concept of metaemotional strategies as defined in the previous lines. Thus, in spite of the apparent overlap the most important difference between the two concepts is that whereas emotional intelligence refers to a person's relatively stable characteristics, whether defined in terms of "trait" or "ability" (see Mayer et al., 2008), each component of metaemotion may be seen as involving an interplay between trait and state (cf. previous discussion).

Implications for the Study and Measurement of Metaemotion

The most obvious implication of our multifaceted view is that researchers should explicitly specify which facet of metaemotion is being studied. This makes it possible to more directly compare findings across different studies, and to build broader

models for how to understand the phenomenon of metaemotion. In addition, there are a number of methodological and theoretical implications. We now address a few of these.

In the aforementioned studies, all three potential facets of metaemotion, including metaemotional experiences, were measured by self-report questionnaires. This also typically applies to the three facets of metacognition. However, a difference between the two research areas concerns the measurement of the primary emotional/cognitive event. In metaemotion research, measures of the primary emotion are not always included (but see Bartsch et al., 2010). In contrast, metacognitive experiences are normally measured in direct conjunction with the cognitive event to which they relate, and performance on the cognitive task is also measured. Examples include "feelings-of-knowing" (Koriat, 2007), "judgements of learning" (Koriat, 2007), and "confidence ratings" (Norman & Price, in press). Very few methods have been developed for studying metaemotional experience in direct conjunction with the primary emotional experience. Future research should aim to develop such methods. However it should be noted that the concept of metaemotional experiences may be broader than that of metacognitive experiences since emotion involves physiological and behavioural response patterns in addition to subjective feelings. The potential range of measures to assess metaemotional experiences may therefore include any technique used to assess emotion, including various psychophysiological techniques to measure the behavioural correlates of emotions, for example, measurement of skin conductance responses, heart rate, blood pressure, cortisol level, electromyography, and respiration rate (Fox, 2008). In addition, Mendonça (2013) points to some properties of metaemotional experience that may have implications for its measurement. First, it is an open question whether emotions are always accompanied by metaemotion, that is, it may not be meaningful to measure metaemotion in conjunction with all forms of emotional experiences because the emotion does not always elicit a metaemotional response. For example, the extent to which anger is accompanied by metaemotion (e.g., anxiety) would depend on a variety of individual and situational factors. One may even hypothesize that asking people to report their metaemotional experiences may even trigger metaemotions in cases where these would otherwise be absent. Second, it is likely that metaemotions are sometimes experienced separately from the primary emotion, whereas in other cases the two are intertwined. An example provided by Mendonça (2013) is a person who experiences sadness about feeling jealous, either immediately upon the experience of jealousy, or "after the strike of jealousy has phenomenologically disappeared" (p. 390). This has consequences for the extent to which metaemotion can be measured independently from the primary emotion. Third, there may be variation in the degree of similarity between the primary emotion and the metaemotion, which may also influence the distinguishability of the two. For instance, a case of "sadness about sadness" is more difficult to measure than a case of "anxiety about sadness," especially if the two co-occur. The development of techniques to measure metaemotional experiences separately from the primary emotion to which they relate should focus on cases in which the metaemotion is both phenomenologically different and temporarily removed from the primary emotion in question.

Throughout the article we have highlighted the close relationship between metaemotional knowledge and metaemotional strategies. The relatedness of the two phenomena has to do with the fact that the application of a strategy will always require and be influenced by relevant knowledge. However there is also a methodological reason why it can sometimes be challenging to differentiate between the two: Self-report measures of strategies will by definition reflect no more than the person's knowledge of their strategies. To the extent that metaemotional strategies involve implicit, procedural knowledge, this will not necessarily correspond to the person's verbalizable strategies. Mendonça's (2013) claims that people may be even less conscious of their metaemotions than their emotions, which adds to the importance of this argument. Future research should aim to develop methods for measuring metaemotional strategies more directly, for instance by applying methodological principles from research on implicit cognition, where dissociation between behavioural performance measures and verbal report is taken to indicate, for instance, that an attitude is implicit (Greenwald, McGhee, & Schwartz, 1998) or that learning is acquired independently of conscious awareness (Cleeremans & French, 2002).

A related implication concerns the debated question of whether or not definitions of metaemotion should include thoughts about emotions. As pointed out by Eisenberg (1996), metaemotion may influence behaviour in ways other than those captured by the person's explicit beliefs, and the inclusion of a cognitive component of metaemotion may therefore seem contradictory. The broader, multifaceted view of metaemotion suggested here opens for the possibility that explicit metaemotional knowledge may sometimes dissociate from the more implicit, automatic properties of metaemotion which are more likely to be reflected in metaemotional experiences and strategies.

Concluding Remarks

In this article we have proposed a framework for understanding the phenomenon of metaemotion that builds on a frequently used distinction in metacognition research, namely the distinction between metacognitive knowledge, metacognitive strategies, and metacognitive experiences. We suggest that metaemotion can be subcategorized into metaemotional knowledge, metaemotional strategies, and metaemotional experiences. This attempt to integrate knowledge from metacognition research into research on metaemotion is inspired by Gottman et al. (1996), who pointed to the two fields as being analogous. It constitutes an attempt to move towards a more precise clarification of the concept of metaemotion, which has been identified by Mendonça (2013) as an area of priority for future research. In our view, the subdivision into three categories of metaemotion can be a useful tool for understanding and interpreting existing research findings. Importantly, it can also be seen as a framework that can guide future research. More specifically, it may allow for the

formulation of more targeted research questions, as well as the development of more precise measurement methods, for instance methods that assess metaemotional experience in direct conjunction with the primary emotional experience.

Notes

1 We thank an anonymous reviewer for pointing out the distinction between metaemotional experiences and cognitive experiences related to one's emotions.

2 We thank an anonymous reviewer for suggesting the distinction between different levels at which metaemotional self-regulation could occur.

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