How Emotions Regulate Social Life

The Emotions as Social Information (EASI) Model

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ABSTRACT—The idea that emotions regulate social interaction is increasingly popular. But exactly how do emotions do this? To address this question, I draw on research on the interpersonal effects of emotions on behavior in personal relationships, parent-child interactions, conflict, negotiation, and leadership, and propose a new framework that can account for existing findings and guide future research: the emotions as social information (EASI) model. I demonstrate that emotional expressions affect observers' behavior by triggering inferential processes and/or affective reactions in them. The predictive strength of these two processes—which may inspire different behaviors—depends on the observer's information processing and on social-relational factors. Examples of moderators that determine the relative predictive strength of inferences and affective reactions include power, need for cognitive closure, time pressure, display rules, and the appropriateness and target of the emotional expression, which are all dis-

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Long before psychology as a science was born, great thinkers such as Aristotle and Darwin already acknowledged the pivotal role of emotional expression in social interaction. Until relatively recently, however, the psychological study of emotion focused predominantly on the *intra*personal effects of emotions (or rather, of diffuse mood states), investigating how an individual's affective state influences his or her own cognitions, motivations, and behavior (see Forgas, 1995). Despite the unquestionable importance of this work, it has not fully appreciated the social nature of emotion. We don't just feel our emotions—we also

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express them in social interaction (Reis & Collins, 2004). This means that other people may observe our emotions and may be influenced by them. This *inter*personal approach is the focus of the present article.

The idea that behavior is influenced by others' emotional expressions is not new (see, e.g., Frijda, 1986). However, only lately has it begun to spark systematic research endeavors. Inspired by early work on emotional expression in parent—child interactions (e.g., Klinnert, Campos, Sorce, Emde, & Svejda, 1983) and personal relationships (e.g., Clark & Taraban, 1991), there has been a recent upsurge in research on the social effects of emotions in other domains, such as conflict, negotiation, and leadership. What is needed now is a unifying framework that can account for the accumulating findings and predict when and how emotional expressions affect behavior at the interpersonal level. I introduce such a model in this article.

THE EMOTIONS AS SOCIAL INFORMATION (EASI) MODEL

The EASI model (see Fig. 1) is rooted in a social-functional approach to emotion (Frijda, 1986; Keltner & Haidt, 1999; Parkinson, 1996). The premise of this perspective is that, just as mood provides information to the self (Schwarz & Clore, 1983), emotional expressions provide information to observers, which may influence their behavior. The EASI model extends this notion by identifying two processes through which observers' behavior may be influenced: inferential processes and affective reactions. Imagine you are meeting a colleague in a bar, and you show up 30 minutes late. Your colleague expresses anger regarding your tardiness. On the one hand, your colleague's anger may lead you to realize that he or she is upset with you; that you are late; and that this is inappropriate (a sequence of inferences), which may motivate you to be punctual next time (behavior). On the other hand, the anger may upset you and make you dislike your colleague (affective reactions), and possibly cause you to

Observer's Affective Reactions Emotional Expression Observer's Information Processing Observer's Relational Factors Observer's Behavior

Fig. 1. The emotions as social information (EASI) model. This model posits that emotional expressions may affect observers' behavior by providing relevant information about the situation (inferential path) and/or by affecting observers' emotions and liking of the expresser (affective reactions path). The relative predictive strength of these paths depends on the observer's information processing and on social-relational factors. These two classes of moderators may operate separately or in parallel and in any order (see the text for additional explanation).

Observer's Inferences

decide not to meet anymore at all (behavior). I discuss both mechanisms and their behavioral implications in turn.

Inferential Processes

Based on others' emotional expressions, observers can often infer information about their feelings, attitudes, relational orientation, and behavioral intentions (Keltner & Haidt, 1999). Such inferences may in turn influence the observer's behavior. The implications of an emotional display vary as a function of the situation, but the basic informational value of discrete emotions generalizes across situations. According to appraisal theory, anger arises when a person's goals are being frustrated and he or she blames someone else for it (Smith, Haynes, Lazarus, & Pope, 1993). When one is the target of an anger expression, one may therefore infer that one did something wrong, and this inference may in turn inform behavior (e.g., apologizing, changing one's conduct). Happiness arises when things are going well and expectations are positive (Smith et al., 1993). Thus, when one is the target of happiness displays, one may conclude that things are going well (inference), which may lead one to stay the course (behavior). Sadness arises when one faces irrevocable loss and has low coping potential (Smith et al., 1993). Thus, observers of sad displays may infer that the expresser is in need of help, which may lead them to offer assistance (Clark, Pataki, & Carver, 1996).

Initial support for the idea that observers draw inferences from others' emotional expressions to inform their own behavior comes from classic work on social referencing, which showed that infants were more likely to cross a visual cliff when their mother smiled at them than when she looked fearful (Klinnert et al., 1983). Presumably the mother's emotional display signals that the environment is safe (happiness) or unsafe (fear), which informs the infant's behavior. Such inferential processes also

guide adult behavior. Clark et al. (1996) reported evidence that people strategically use displays of emotion to influence others, such as expressing sadness to solicit help. This can be effective (at least in communal relationships), because observers may infer that the expresser is needy and dependent.

Emotional expressions may also influence behavior in more competitive settings. Van Kleef, De Dreu, and Manstead (2004a) investigated the interpersonal effects of anger and happiness in conflict and negotiation. In a computer-mediated negotiation, participants received messages from their (simulated) opponent that included verbal expressions of emotion (e.g., "this negotiation pisses me off"). Participants with an angry opponent made larger concessions than did participants with a nonemotional opponent, and participants with a happy opponent made smaller concessions. Negotiators with an angry opponent inferred that the opponent had a high limit (inference), which led them to concede to avoid impasse (strategic behavior). Negotiators with a happy opponent estimated the opponent's limit to be low, and accordingly they conceded less. Negotiators draw similar inferences from nonverbal expressions of emotion, and these inferences facilitate the discovery of win-win solutions in multi-issue negotiations (Pietroni, Van Kleef, De Dreu, & Pagliaro, 2008).

The workings of the inferential pathway were also evident in a study that compared the effects of different negative emotions in negotiation: disappointment, worry, guilt, and regret (Van Kleef, De Dreu, & Manstead, 2006). Participants who were confronted with a guilty or regretful opponent inferred that the other had claimed too much, and this led them to increase their own demands. Participants with a disappointed or worried opponent, in contrast, inferred that the other had received too little, which led them to lower their demands.

Finally, a recent study found that work teams use the emotions of their leader to draw inferences regarding the quality of their

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performance (Van Kleef et al., in press). Four-person teams worked on a task, during which they were supposedly observed by their leader via cameras. After a while, the leader (a trained actor) appeared on a video screen and provided standardized feedback and tips to the team, expressing either happiness or anger by means of facial expressions, vocal intonation, and bodily postures. Even though the wording of the feedback was identical across conditions, team members with an angry leader inferred that they had performed poorly, whereas those with a happy leader inferred that they had performed well. Compatible findings were obtained in a study involving face-to-face interactions between leader and followers (Sy, Côté, & Saavedra, 2005).

Affective Reactions

Emotional expressions can also wield interpersonal influence by eliciting affective reactions in observers, which may subsequently affect their behavior. Such affective reactions consist of two types. First, emotions may spread directly from expresser to observer via emotional-contagion processes, involving mirrorneuron activity, mimicry, and afferent feedback (i.e., physiological feedback from facial, vocal, and postural movements). Second, emotional expressions may affect impressions and interpersonal liking, perhaps in part through the social intentions and relational orientations that they convey. Clark and Taraban (1991) showed that expressions of happiness increased liking and expressions of irritability decreased liking in both communal and exchange relationships. Similarly, negotiators whose counterparts expressed anger became angry themselves, disliked the counterpart, were less satisfied, and were less willing to meet again, whereas those whose counterparts expressed happiness became happy themselves, liked the other, were more satisfied, and were more willing to meet again (Van Kleef et al., 2004a, 2004b). Work teams with an angry leader also became angry themselves and developed a negative impression of the leader, whereas teams with a happy leader became happy and formed a positive impression of the leader (Sy et al., 2005; Van Kleef et al., in press).

Under particular circumstances (see below), such affective reactions can be highly predictive of behavior. A study on anger in conflict revealed that the negative affective reactions (e.g., a desire for revenge) that are elicited by expressions of anger can produce competitive and retaliatory behavior (Van Kleef & Côté, 2007). Similarly, a study on coalition formation showed that participants disliked parties who expressed anger in the process, which often led them to exclude angry parties from the coalition (Van Beest, Van Kleef, & Van Dijk, 2008).

Converging Versus Competing Processes

We have seen that behavioral reactions to emotional expressions are fueled by both inferential processes and affective reactions, which are distinct but mutually influential. The two processes may relate to one another in different ways. First, inferences and affective reactions may converge to predict the same behavior, as when the distress of a significant other signals that help is required (inference) and elicits compassion and sympathy (affective reaction), both of which foster supportive behavior (Clark et al., 1996). Second, inferences and affective reactions may motivate opposite behaviors. For instance, when faced with an angry negotiation opponent, one's own reciprocal anger may inspire competition, but one's inference that the other is upset because his or her limits have been reached may encourage cooperation, depending on one's negotiation goals and strategy (Van Kleef et al., 2004a). Third, the two processes may influence one another, as when expressions of anger lead the target to infer that the expresser disapproves of his or her behavior, which in turn fuels feelings of anger. Regardless of how the two processes relate in a particular situation, the EASI model posits that their relative strength is moderated by two key forces: information processing and social-relational factors.

Information Processing

A core assumption of the EASI model is that emotional expressions provide information. Building on this idea, the model posits that the interpersonal effects of emotional expressions depend on the observer's motivation and ability to process the information represented in these expressions. The more thorough the information processing, the stronger the predictive power of inferences; the shallower the information processing, the stronger the predictive power of affective reactions. In keeping with this hypothesis, the strategic information conveyed by emotions expressed in negotiation is a better predictor of behavior when information-processing motivation is high rather than low (Van Kleef et al., 2004b). Specifically, negotiators conceded more to an angry counterpart than to a happy one when they had low need for cognitive closure, time pressure was low, or they had low power (circumstances that heighten informationprocessing motivation), but not when they had high need for closure, time pressure was high, or they had high power (circumstances that lower information-processing motivation). In a study on interpersonal relations, participants who felt powerful were less motivated than those who felt less powerful to understand a conversation partner's emotional suffering (Van Kleef et al., 2008). Finally, in the leadership study by me and my colleagues (Van Kleef et al., in press), followers with high dispositional information-processing motivation performed better when their leader displayed anger because they inferred from the anger that their performance was suboptimal (inference), whereas followers with low information-processing motivation performed better when the leader displayed happiness because this made them feel good and instilled a positive impression (affective reactions; see Fig. 2).

Social-Relational Factors

The relative predictive power of inferences and affective reactions also depends on social-relational factors. Among other

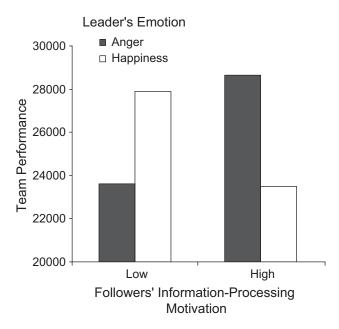


Fig. 2. The effects of leader displays of anger versus happiness on the performance of four-person teams on an interactive task, as a function of team members' information-processing motivation. Performance scores in this study ranged from 11796 to 40586 points.

things, these include the nature of the interpersonal relationship, prevailing (cultural) norms (e.g., "display rules"), and the way the emotion is expressed (e.g., directed at the person vs. at the situation). These factors influence the (perceived) appropriateness of emotional expressions, which in turn influences targets' behavioral reactions. Several studies have documented stronger affective reactions to inappropriate (relative to appropriate) emotional displays. In one study, negotiators responded cooperatively to angry (as opposed to happy) opponents when the anger was directed at their offers (and this was mediated by inferences regarding the opponent's negotiation limit), but they responded competitively when the anger was directed at them personally (Steinel, Van Kleef, & Harinck, 2008). In another study, negotiators conceded to angry (as opposed to nonemotional) opponents when the anger was deemed appropriate, whereas they retaliated when the anger was deemed inappropriate because it violated a display rule (especially when they had high power; Van Kleef & Côté, 2007).

CONCLUSIONS AND FUTURE DIRECTIONS

The EASI model contributes to the literature in several ways. First, it provides a framework for understanding the interpersonal effects of emotions. As such, it complements existing models that attempt to explain the intrapersonal effects of emotions (e.g., Forgas, 1995; Schwarz & Clore, 1983). Second, the model focuses on discrete emotions rather than diffuse moods. Thus, the model moves beyond the valence approach that

characterizes many existing models, and posits that each discrete emotion conveys specific information. Third, the EASI model distinguishes two processes through which emotional expressions exert interpersonal influence (inferences vs. affective reactions), and it identifies two classes of moderators (information-processing and social-relational factors) that tip the balance in favor of one process or the other. Thus, the model integrates apparently inconsistent findings into a coherent account of the interpersonal effects of emotional expressions on behavior.

Currently, most support for the model as a whole comes from studies on conflict, negotiation, leadership, and team performance, although work on interpersonal relationships (e.g., Clark et al., 1996; Van Kleef et al., 2008) and parent-child interactions (e.g., Klinnert et al., 1983) supports parts of the model as well. One of the challenges for future research will be to test the full model in different contexts. Do the insights presented here generalize to other settings, such as close relationships (see Reis & Collins, 2004)? Other fundamental questions arise regarding the effects of emotional expressions in "noisy" environments. According to the current analysis, targets should respond similarly to emotional expressions regardless of whether they perceive them accurately, but this is an empirical question. A related question that remains to be explored is how people make sense of ambiguous or mixed emotional expressions.

Several intriguing applied questions also arise, for instance in sport psychology, parenting, clinical practice, and the political arena. Can sports coaches enhance the performance of their teams by making use of emotional expressions? How can parents use their emotions to teach their children right and wrong? How should behavioral therapists regulate their emotions so as to create good rapport with their clients and also effectuate behavioral change? And how should presidential candidates manage their emotions if they wish to garner maximum support from the electorate? Exploring these and other questions will further illuminate how emotions regulate social life.

Recommended Reading

Clark, M.S., Pataki, S.P., & Carver, V.H. (1996). (See References). An enlightening account of the strategic use of emotions in social relations.

Darwin, C. (1998). The expression of the emotions in man and animals (3rd ed.). London: HarperCollins. (Original work published 1872) A highly readable classic on the origins and functionality of emotional expression.

Keltner, D., & Haidt, J. (1999). (See References). An insightful analysis of the social functions of emotions at the individual, dyadic, group, and cultural levels of analysis.

Parkinson, B., Fischer, A.H., & Manstead, A.S.R. (2005). *Emotion in social relations: Cultural, group, and interpersonal processes*. New York: Psychology Press. Presents a deeply social conception of emotion, arguing persuasively that emotions are first and foremost social (rather than individual) phenomena.

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