

The Emotion-as-Social-Information Model: Theory and Application

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Abstract

The Emotions as Social Information (EASI) model aims to elucidate how others' emotions influence observers' decision-making through affective reaction and inferential processing mechanisms, and the moderating effects of cognitive motivation and appropriateness judgments therein. This article distinguishes the EASI model from related theories, and based on an analysis of 63 empirical studies employing this theory, systematically reviews and summarizes the applications of the EASI model in the domains of leadership, teams, customer service, negotiation, and persuasion, as well as the specific factors influencing the boundary conditions of the EASI model—namely, information processing depth and appropriateness judgments. Future research should enhance systematic validation, deepen integration with other theories, expand application contexts, and optimize measurement methodologies.

Full Text

The Theory and Application of the Emotions as Social Information Model

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Abstract: The Emotions as Social Information (EASI) model posits that emotional expressions influence observers' decisions through two mechanisms— affective reactions and inferential processes—and that these effects are moderated by the observer's information processing depth and perceived appropriateness of the emotional expression. This paper distinguishes the EASI model from related theories and, based on an analysis of 63 empirical studies explicitly using the EASI framework, systematically reviews its applications in leadership, team dynamics, customer service, negotiation, and persuasion. We also summarize

the specific factors influencing the model's boundary conditions: the degree of information processing and appropriateness judgments. Future research should strengthen systematic verification, deepen integration with other theories, expand application contexts, and improve measurement methods.

Keywords: Emotions as Social Information Model, affective reactions, inferential processes, epistemic motivation, perceived appropriateness

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1 Introduction

In interpersonal interactions, people frequently express their own emotions while simultaneously decoding others' emotional displays. Emotions not only influence the self but also affect others, thereby exerting social effects. The earliest explorations of such social effects emerged from parent-child interaction research (Klannert et al., 1983). At the turn of the 21st century, inspired by studies on emotional expression in relationships, scholars began examining emotional social effects in leadership, negotiation, and conflict research (van Kleef, 2009). However, emotional research at that time suffered from three key limitations: first, an overemphasis on intrapersonal effects; second, a tendency to focus on positive/negative mood rather than discrete emotions; and third, a neglect of social context in emotion-behavior research (van Kleef, De Dreu, et al., 2010). To address these gaps, van Kleef (2009) integrated affect-as-information theory (Schwarz & Clore, 1983) with dual-process models (Kahneman & Frederick, 2002) to propose a mechanistic, integrative framework for understanding interpersonal emotional influence—the “Emotions as Social Information” (EASI) model.

Since its inception, the EASI model has attracted widespread scholarly attention. Regrettably, as a relatively new theory from the past decade, research on the EASI model remains scarce in China. While Chen and Wang (2013) and van Kleef (2016) provided detailed introductions and discussions of the model, they did not systematically search and synthesize empirical studies based on it. Ma et al. (2015) and Feng (2019) reviewed the organizational impact of leaders' negative emotions or anger using the EASI framework, but their reviews excluded positive emotions and other domains. Critical questions remain: What is the EASI model's unique contribution compared to other emotion theories? What progress has the model made over the past decade? What scientific questions has it helped solve across various fields? What issues warrant further attention? These questions need clarification. Therefore, this paper aims to review the EASI model's progress across domains over the past decade, differentiate it from related theories, clarify its unique contributions, and offer recommendations for future research and application.

2 The EASI Model

Grounded in the interpersonal effects of emotion, the EASI model conceptualizes emotions as social information. When individuals express emotions, they simultaneously convey information about their cognitions and attitudes, serving a signaling function in interpersonal decision-making (van Kleef, 2009). The model proposes that observers process others' emotional information through two pathways: affective reactions and inferential processes. Affective reactions refer to emotional expressions directly triggering emotional states in observers, generating "interpersonal effects" at the emotional level. Inferential processes refer to observers using others' emotional expressions as informational input for social decision-making, generating "interpersonal effects" at the cognitive level (van Kleef, De Dreu, et al., 2010). Both processing pathways operate simultaneously and influence each other, primarily by jointly predicting the same behavior or driving opposite behaviors. Whether affective reactions or inferential processes better predict observers' decisions depends on two moderators: information processing depth and perceived appropriateness (van Kleef, 2009).

Information processing depth refers to the comprehensiveness and thoroughness with which observers process emotional information, influenced by their motivation and ability to process information (van Kleef, De Dreu, et al., 2010; Ma et al., 2015). When observers possess stronger motivation and ability to process information, inferential processes become more predictive. Conversely, when motivation and ability are low, affective reactions become more predictive. Perceived appropriateness refers to observers' judgments about whether an emotional expression aligns with explicit or implicit social norms and rules in a given context (van Kleef et al., 2012). Such judgments depend on situational characteristics, expression content, expresser characteristics, and observer characteristics (van Kleef, 2009). When observers perceive an emotional expression as inappropriate, affective reactions become more predictive; when perceived as appropriate, inferential processes dominate (van Kleef, De Dreu, et al., 2010; Chen & Wang, 2013).

3 Distinguishing the EASI Model from Related Theories

The EASI model is rooted in rich emotion theories and social psychological research, and some of its foundational assumptions are not unique to the model (van Kleef, 2016). For instance, the notion that emotions serve signaling or social functions has been extensively discussed in affect-as-information theory and the dual threshold model of anger (Buck, 1994; Geddes & Callister, 2007; Schwarz & Clore, 1983). Theories related to the affective reaction mechanism include emotional contagion theory and affective events theory. Therefore, we first clarify the EASI model's similarities and differences with related theories to illuminate its unique contributions, as summarized in Table 1 .

3.1 Affect-as-Information Theory

Affect-as-information theory posits that people use their own emotional feelings (conscious or unconscious) as sources of information that influence judgment and cognitive style (Schwarz & Clore, 1983). The core distinction from the EASI model lies in the level of analysis: affect-as-information theory focuses on how individuals' own emotions affect themselves, whereas the EASI model focuses on how others' emotions affect observers. Second, the EASI model further proposes two mediating mechanisms— affective reactions and inferential processes.

3.2 Dual-Process Model

The EASI model's affective reaction and inferential process mechanisms draw upon dual-process models from decision-making and reasoning research. Dual-process models propose that decision-making involves two distinct systems: an intuitive heuristic system and a rational reasoning system (Kahneman & Frederick, 2002). However, this theory differs from the EASI model in its view of how the two systems relate. Dual-process theorists generally consider heuristic and reasoning systems to operate simultaneously, independently, and in parallel, with either system alone capable of influencing decisions (Sun et al., 2007). In contrast, the EASI model posits that when processing emotional information, affective reactions and inferential processes occur simultaneously and influence each other, though with varying intensities. Second, the EASI model identifies boundary conditions that determine the relative strength of the two systems. Finally, the EASI model focuses exclusively on emotional information, whereas dual-process models also examine non-emotional communication.

3.3 Dual Threshold Model of Anger

The dual threshold model of anger proposes that anger in organizations has two thresholds: an expression threshold and an impropriety threshold. Anger falling between these thresholds is more likely to yield positive outcomes, while anger outside these thresholds (unexpressed or excessive) produces negative consequences (Geddes & Callister, 2007). Both this model and the EASI model emphasize appropriateness judgments, but the EASI model additionally highlights the crucial role of information processing depth. Moreover, compared to the EASI model's broad emotional scope, the dual threshold model focuses exclusively on anger.

3.4 Emotional Contagion Theory

Emotional contagion theory posits that emotions can transfer from one individual to another, with emotional convergence occurring consciously or unconsciously (Hatfield et al., 1992). Two research perspectives explain this mechanism. The first, grounded in perception theory, suggests that emotions arise from observing one's own or others' behaviors. For example, self-perception theory (Laird & Bresler, 1990) proposes that people infer their emotions by observ-

ing others' behaviors and contexts. This perspective shares similarities with the EASI model's inferential process mechanism, but emotional contagion processes a broader range of information, including not only emotions but also behaviors. Furthermore, emotional contagion's outcome variable is the observer's own emotion, whereas the EASI model's outcome is the observer's behavior. The second and most influential perspective is primitive emotional contagion (Hatfield et al., 1992), which refers to individuals' automatic, unconscious tendency to mimic and synchronize others' facial expressions, vocalizations, postures, and movements, subsequently experiencing the emotions they imitate. The EASI model's affective reaction mechanism includes this primitive emotional contagion but also encompasses other emotional responses to the expresser (e.g., increased or decreased liking).

3.5 Affective Events Theory

Affective events theory (AET) posits that experiences of work events trigger emotional reactions, which either directly influence behavior or indirectly affect behavior through work attitudes (Weiss & Cropanzano, 1996). AET also examines the antecedents of employees' emotional reactions in work settings, proposing that cognitive appraisal is a necessary prerequisite for emotion generation, with appraisals of work events determining emotional reactions. However, AET differs from the EASI model in several ways. First, AET aims to explain the emergence of emotional reactions and intrapersonal consequences, whereas the EASI model focuses on interpersonal consequences of emotional expression. Second, the theories differ in scope: AET concentrates on how emotional reactions shape work attitudes and behaviors, while the EASI model seeks to explain emotional social effects across various domains.

In summary, these theories have all contributed to the EASI model's development. While the EASI model shares some similarities with existing theories, it remains distinct. By elucidating the interpersonal effects of emotion, the EASI model enriches the intrapersonal perspective of affect-as-information theory. By drawing on emotional contagion theory and dual-process models, it translates emotion information effects to the interpersonal level. The EASI model's scope is narrower than some theories (e.g., dual-process models) but broader than others (e.g., emotional contagion theory, dual threshold model of anger). These differences collectively establish the EASI model's unique contribution to explaining emotion-related phenomena across domains.

4 Research on the EASI Model's Dual Mediation Mechanisms

Overall, the EASI model's affective reaction and inferential process mechanisms have been extensively validated across domains, including 33 studies in leadership, 9 in teams, 8 in customer service, 8 in negotiation, and 5 in persuasion.

4.1 Applications in Leadership Research

Leadership fundamentally involves influencing others, and emotional expression represents a crucial source of social influence (van Kleef, 2009). Consequently, emotional expression is vital in leader-follower interactions. The EASI model's focus on interpersonal emotional effects gives it natural advantages in explaining how leader emotions influence followers and teams, resulting in a substantial body of research.

4.1.1 Effects of Leader Emotions on Leadership Effectiveness During interactions with subordinates, leaders' emotions directly affect followers' evaluations and perceptions of leadership effectiveness (Feng & Liu, 2018). For instance, a study examining both disappointment and anger feedback found that whereas disappointment evoked employee guilt, leader anger triggered corresponding anger in employees, leading to more negative leader evaluations (Johnson & Connelly, 2014). Another study investigated how leader sadness and anger influence leadership effectiveness from a power source perspective (Schwarz Müller et al., 2017), finding that leader sadness increased referent power, while leader anger enhanced leadership effectiveness through legitimate power but simultaneously diminished coercive and referent power, offsetting the positive effect. However, leader anger does not always yield negative outcomes, a finding supported by numerous empirical studies (Feng, 2019; Wang et al., 2018). For example, a scenario experiment with student samples revealed that leader anger expressions' impact on leadership quality evaluations varied depending on follower agreeableness (van Kleef, Homan, et al., 2010). Similarly, Wang et al. (2018) found that leader anger expressions' effect on followers' leadership effectiveness perceptions depended on violation type.

The EASI model's inferential processes encompass broad content. Followers may interpret leader anger as low charisma (Damen et al., 2008; Wang et al., 2018) or as a signal of poor performance (van Kleef et al., 2009; van Kleef, Anastasopoulou, et al., 2010). Research shows that different inferences lead to different perceptions of leadership effectiveness (Shao et al., 2018). Specifically, when followers' inferences about leader anger focus on traits, leader anger negatively correlates with leadership effectiveness, though the study did not confirm a positive relationship when inferences focused on motivation.

Beyond negative emotions, researchers have explored how leader positive emotions affect leadership effectiveness. For example, leader expressions of pride may increase followers' agency inferences but decrease communal and democratic leadership style inferences (Ritzenhöfer, Brosi, & Welpe, 2019), producing selfish attributions that damage leader satisfaction and organizational citizenship behaviors (Ritzenhöfer, Brosi, Spörrle, et al., 2019). Conversely, leader gratitude expressions reduce selfish attributions and generate positive outcomes (Ritzenhöfer, Brosi, Spörrle, et al., 2019). Leaders' psychological capital, transmitted through positive emotional expression, can enhance team positive affect and thereby improve leadership effectiveness (Rego et al., 2019). Additionally,

leaders expressing hope within teams can increase followers' hope and garner support (Cohen-Chen et al., 2019).

4.1.2 Effects of Leader Emotions on Followers According to the EASI model, when followers unconsciously “catch,” mimic, or consciously interpret leaders' emotional displays, their own emotions, cognitions, attitudes, behaviors, and performance are affected (van Kleef et al., 2012).

Followers' Emotions. The EASI model posits that leader emotions can contagiously transfer to followers via affective reactions, generating similar emotional experiences (van Knippenberg & van Kleef, 2016). When leaders display positive affect, followers typically experience positive emotions; conversely, negative leader affect produces fear, sadness, or anger in followers (Lindebaum et al., 2016; Liu et al., 2017). Coaches' happy or angry emotional displays before and during games influence athletes' experienced happiness or anger (van Kleef et al., 2019). Leaders high in anxious attachment undermine followers' positive emotions and job satisfaction, whereas avoidant leaders reduce followers' negative emotions and increase satisfaction (Kafetsios et al., 2014). Leader emotions can contagiously affect not only individuals but entire teams. When leaders transmit positive energy (Rego et al., 2019) or use affect-improving interpersonal emotion regulation strategies, employees experience more positive emotions and teams develop positive affective climates (Madrid et al., 2019). Conversely, affect-worsening strategies foster negative team climates (Madrid et al., 2019).

Notably, emotions transmitted through affective reactions do not always align perfectly with followers' experienced emotions (Schwarz Müller et al., 2018). Leader anger may trigger reciprocal emotions (anger) or complementary emotions (anxiety) in followers (Schwarz Müller et al., 2018).

Followers' Cognitions and Attitudes. Leader emotions convey rich information that followers process and react to, forming corresponding cognitions and attitudes (van Kleef et al., 2012). Liu et al. (2017) found that leader positive emotions could enhance follower psychological safety through emotional contagion. Meanwhile, leader anger increased loyalty through legitimate power but simultaneously diminished coercive and referent power, weakening loyalty (Schwarz Müller et al., 2017). Research on leader emotions and follower trust found that when followers committed moral violations, leader moral anger reduced perceived leader benevolence, damaging affective trust (Shao, 2019). Beyond discrete emotions, leader mood also matters: high leader positive mood strengthened the effect of team functional diversity on collective team identity, while high negative mood enhanced the effect of diversity on information elaboration (Shemla et al., 2020).

Followers' Behaviors. (1) **Voice Behavior.** Current findings indicate that leader positive emotions promote follower voice through affective reactions (e.g., triggering positive emotions, increasing liking) (Liu et al., 2017; Song et al.,

2019). However, the effect of leader negative emotions on voice remains controversial and complex. Liu et al. (2017) found that despite triggering negative emotions and negative judgments, leader negative emotions could also promote voice. Conversely, another study suggested that leader negative emotional expressions damaged trust and liking, inhibiting promotive voice (Song, 2018).

- (2) **Prosocial Behavior.** Research shows leader anger undermines prosocial behavior. Compared to happiness, leader anger reduces follower liking and organizational citizenship behavior (Koning & van Kleef, 2015). Executive anger promotes unethical behavior, damages middle managers' servant leadership, and ultimately negatively affects employee ethical conduct (Stollberger et al., 2020). Leader anger may also provoke follower anger and increase perceived coercive power while decreasing referent power, increasing deviant behavior (Schwarz Müller et al., 2017; Schwarz Müller et al., 2018). However, not all negative emotions reduce prosocial behavior. Johnson and Connelly (2014) found that disappointment feedback evoked employee guilt, leading to more positive social behavior. A "social dilemma" simulation experiment found that leader sadness expressions increased cooperation, while leader happiness combined with self-sacrifice promoted cooperation (Gao & Li, 2015).

Follower Performance. Leader emotions affect individual and team performance (Chi & Ho, 2014; van Kleef et al., 2009; van Kleef, Homan, et al., 2010; Wang & Seibert, 2015). Compared to disappointment or neutral emotions, leader anger feedback may trigger follower anger (Johnson & Connelly, 2014) and undermine task engagement and motivation among low-epistemic-motivation followers (van Kleef, Anastasopoulou, et al., 2010), resulting in poorer creative task performance. Compared to happiness, coach anger expressions during games harm team performance (van Kleef et al., 2019). However, leader anger can also help employees understand ambiguous social interactions and improve performance (Lindebaum et al., 2016; Schwarz Müller et al., 2018). For example, intense leader anger can trigger follower anxiety and increase work effort (Schwarz Müller et al., 2018). A vocabulary memory task experiment found that although angry (vs. happy) instructor tones reduced students' competence and warmth ratings, they improved learning performance (van Doorn et al., 2014). Research also shows that regardless of whether leaders express anger or happiness, emotional harmony (alignment between felt and expressed emotion) benefits follower performance (Yang & Li, 2017). Another mood-focused study found that when leaders displayed both high positive and negative mood, team functional diversity enhanced team performance (Shemla et al., 2020).

Growing empirical research confirms the importance of emotion in leadership, with leaders' emotional displays influencing followers' emotions, cognitions, and behaviors (van Kleef, Anastasopoulou, et al., 2010). Notably, claims that "negative emotions through the affective reaction pathway consistently produce negative outcomes" (Feng, 2019; van Kleef et al., 2009) are inaccurate. Not only may expresser and receiver emotions fail to converge (Schwarz Müller et al., 2018),

but even when they do, negative outcomes are not inevitable. For instance, Lindebaum et al.'s (2016) phenomenological interviews with 20 mid-level officers found that in military contexts, leader anger contagion actually heightened situational urgency and produced positive work outcomes.

Additionally, research has predominantly focused on leader-to-follower effects, with only three studies examining follower-to-leader effects. Hu and Shi (2015) found that employees' surface-acting happiness reduced leaders' perceived information sharing, while suppressed negative emotions increased it. Deng et al. (2020) explored consequences of employees' emotional labor strategies, finding that surface acting reduced leaders' liking and competence perceptions, decreasing promotion recommendations, whereas deep acting increased them. Although leaders are primary organizational influencers, followers' emotional expressions also affect leaders' work relationships and success (Duffy et al., 2006).

We also identified potential misapplications of the EASI model. For example, Smallfield et al. (2020) attempted to explain how team helping behaviors influence leaders' abusive and empowering behaviors through leaders' perceived team positive affective tone. However, team helping is not an emotional expression, and perceived affective tone is not expressed emotion, making this application questionable.

4.2 Applications in Team Research

Emotional expressions in teams provide critical information for members to understand situations and prepare for action (van Kleef, 2009). By clarifying how individuals respond to others' emotional displays, the EASI model helps explain how emotions shape team processes and outcomes (van Kleef & Fischer, 2016).

Nine team studies have applied the EASI model. Homan et al. (2016) found that compared to positive emotions, team members' negative emotional expressions more readily triggered negative inferences about team functioning (e.g., trust, satisfaction, efficiency, conflict). Another study revealed differential effects of discrete negative emotions: compared to disappointment, team member anger led teammates to infer a less cooperative team climate (van Doorn et al., 2012). Even when individuals were not personally treated unfairly and lacked clear information about others' treatment, colleagues' anger or guilt influenced their justice judgments, outcome satisfaction, helping intentions, and retaliation (Hillebrandt & Barclay, 2017b). Heerdink et al. (2019) conducted three experiments varying stimuli, contexts, and violations, finding that observers use others' emotional expressions to infer not only whether behaviors are inappropriate but also why: anger expressions primarily signal autonomy violations, whereas disgust signals purity violations. Strategically expressing both negative and positive emotions toward colleagues who violate important norms can enhance overall work efficiency by promoting cooperation (Peralta et al., 2020).

However, when colleagues perceive expressed happiness as inauthentic, it damages communication satisfaction (Hu & Shi, 2015). When giving suggestions, recipients' positive mood can increase speakers' psychological safety and promote promotive voice behavior (Liu et al., 2015).

Emotional interpersonal effects extend beyond physical teams to virtual teams. When team members' emotional text messages and behaviors are inconsistent, they trigger negative emotions in teammates (Cheshin et al., 2011). Beyond text communication, using smiley emojis in emails does not increase perceived warmth but reduces perceived competence, decreasing information sharing willingness (Glikson et al., 2018). This challenges van Kleef's proposition that "as long as emotional expressions are accurately perceived, the medium (e.g., gestures, voice, text, emojis) produces equivalent effects" (van Kleef et al., 2012). Future research should examine whether and why different expression modalities produce different effects. Additionally, current team research provides limited evidence for affective reaction mechanisms, with only one study (Cheshin et al., 2011) examining this mediation. Given the importance of affective reactions in teams, future research should strengthen exploration of this mechanism.

4.3 Applications in Customer Service Research

The EASI model has been applied to service contexts. A field study and scenario experiment found that employee emotional expression intensity primarily influenced customer loyalty and purchase intentions through affective reactions, while authenticity operated through cognitive inference, with customer epistemic motivation as a moderator (Wang et al., 2017). Unlike face-to-face expression, an online service study found that service employees' use of smiley emojis triggered customers' unconscious mimicry and conscious positive affective reactions, increasing relationship strength and purchase intentions (Smith & Rose, 2020). Another study found that overly intense displays of happiness or anger made customers perceive inauthenticity and inappropriateness, reducing trust and satisfaction (Cheshin et al., 2018). In service failure situations, low power distance service employees compensated more when facing high-intensity angry customers due to threat perception, whereas high power distance employees compensated less due to inappropriateness perception (Glikson et al., 2019). When encountering negative customers, service employees' proactive personality and information exchange can weaken the positive effect of pre-service customer negative emotions on employee negative emotions during service, and also weaken the negative effect of employee negative emotions on post-service customer evaluations (Liu et al., in press). A diary study and field experiment with cross-industry service employees (restaurant staff, drivers, barbers) found that deep acting and automatic emotion regulation positively correlated with tip income (Hülshager et al., 2015). Liu et al. (2019) examined how congruence between service employees' actual emotional labor and customers' perceived emotional labor affects customer trust. They found that customer trust was highest when both actual and perceived deep acting were high (vs. low), and

also higher when perceived deep acting exceeded actual deep acting. Conversely, as both surface acting and perceived surface acting increased, customer trust followed a U-shaped pattern (Liu et al., 2019).

Current applications in service contexts face several unresolved issues. First, research on customer emotions' effects on service employees has focused almost exclusively on negative emotions (especially anger), with scarce examination of positive customer emotions. Second, studies on employee emotional expressions' effects have concentrated on happiness, anger, and general positive affect, neglecting other emotions. Research shows that expressing disappointment, sadness, and guilt produces different consequences than anger (Johnson & Connelly, 2014), and expressing pride and gratitude differs from happiness (Ritzenhöfer, Brosi, Spörrle, et al., 2019). Future research should explore the interpersonal effects of other emotions in service contexts. Third, with the rise of online services and communication tools, emotional expression forms have diversified (e.g., emojis, stickers). Existing research remains focused on verbal expression, with limited examination of other modalities' interpersonal effects.

4.4 Applications in Negotiation Research

Early negotiation research has directly or indirectly confirmed the profound impact of emotional expressions (Chen & Wang, 2013; van Kleef et al., 2004). The EASI model provides a valuable explanatory framework for studying interpersonal emotional influence in negotiations. The first empirical evidence for affective reaction mechanisms in negotiation came from Lelieveld et al.'s (2012) ultimatum game experiment, which found that responders' disappointment expressions made proposers feel guilty and allocate more resources. Beyond disappointment, a repeated zero-sum game experiment found that responders' gratitude expressions awakened proposers' perceptions of kindness, strengthening prosocial motivation and influencing subsequent allocation decisions (Kong & Belkin, 2019). However, happiness expressions did not produce similar positive effects; happy responses might increase proposers' cooperation perceptions, thereby preserving concessions (Hillebrandt & Barclay, 2017a).

Compared to other emotions, anger has received the most attention in negotiation research. Experiments across various contexts and negotiation types have found that expressing anger may increase opponents' inferences about negotiator toughness (Adam & Brett, 2015; Adam & Shirako, 2013) or enhance perceived deadlock threat (Adam & Shirako, 2013; Hillebrandt & Barclay, 2017a), prompting more concessions (Adam et al., 2010). However, anger expression can also backfire by provoking opponent anger and reducing allocated resources (Lelieveld et al., 2012), triggering selfish inferences that cause negotiation impasse (Yip & Schweinsberg, 2017), or eliciting feelings of mistreatment that invite covert retaliation (Wang et al., 2012).

Regrettably, most research on emotional influence in negotiation has been conducted in laboratories rather than real interactive settings, potentially limiting

external validity. Additionally, existing studies focus on dyadic negotiations, whereas intergroup negotiations are common in reality. Emotional social effects in groups are more complex and unpredictable, representing a promising avenue for future research.

4.5 Applications in Persuasion Research

van Kleef et al. (2015) designed five experiments using different media (written text, images, video clips, emojis) to convey emotions, finding that individuals interpret others' emotional expressions as information when forming attitudes. Persuasion was stronger when negative topics were delivered with sad (vs. happy) emotions and positive topics with happy (vs. sad) emotions (van Kleef et al., 2015). Compared to appeals using disgust, fear, happiness, and sadness, anger appeals increased persuasion by signaling threat and triggering analytical reasoning (Calanchini et al., 2016). However, not all decision-makers can be persuaded. When persuasion contexts involve disagreement, angry (vs. non-emotional) expressions are more likely to be perceived as inappropriate and interpreted as unfriendliness and incompetence, producing counterproductive effects (Riet et al., 2018). When decision-makers reject advisors' suggestions, it damages advisors' perceived social value, reducing prosocial motivation and prompting dishonest advice in subsequent interactions; however, decision-makers' gratitude expressions can mitigate these negative effects (Belkin & Kong, 2018).

Similar to negotiation research, persuasion studies have primarily been laboratory-based single-interaction experiments, limiting external validity. Moreover, evidence for affective reaction mechanisms in the relationship between emotional expression and team outcomes is lacking. Although persuasion is naturally linked to reasoning, individuals' affective reactions also directly influence observers' attitudes (van Kleef, 2016).

5 Research on Boundary Conditions of the EASI Model

Although the EASI model addresses how emotional expressions influence observers' decisions, contradictory effects can emerge even for the same emotion through identical mediating mechanisms (e.g., Adam & Shirako, 2013; Yip & Schweinsberg, 2017). The EASI model posits that observers' information processing depth and appropriateness judgments determine the relative strength of affective reactions and inferential processes (van Kleef, 2009). Consequently, researchers have increasingly focused on what influences these two factors (Chi & Ho, 2014; Wang et al., 2018), thereby developing and refining the EASI model. We now review research on these boundary conditions.

5.1 Information Processing Depth

According to the EASI model, observers' information processing depth depends on their epistemic motivation and reasoning ability (van Kleef, 2009).

5.1.1 Epistemic Motivation The first empirical evidence for information processing depth's moderating role came from van Kleef et al.'s (2009) experiment, which used video clips of leaders expressing anger or happiness to examine effects on follower performance. Results showed that individual differences in information processing influenced the extent to which followers drew inferences from leaders' emotional displays. Specifically, high-epistemic-motivation teams performed better when leaders expressed anger, whereas low-motivation teams performed better with happy leaders. Similarly, anger's effect on creativity depended on individual epistemic motivation: anger enhanced creativity among high-motivation individuals but undermined it among low-motivation individuals (van Kleef et al., 2010). Another study simultaneously examined employee efficiency and epistemic motivation, finding that for high-efficiency employees, leader emotional harmony's positive effect on performance weakened with high follower motivation but strengthened for low-efficiency employees (Yang & Li, 2017). Leaders' epistemic motivation also moderates consequences of followers' emotional labor strategies: when followers engaged in surface acting, high-motivation leaders liked them less and perceived them as less competent (Deng et al., 2010).

Information processing depth's moderating role applies across domains. In service contexts, when customers had high epistemic motivation, the positive effect of employee positive emotional expression intensity on loyalty weakened, while the positive effect of authenticity strengthened (Wang et al., 2017). In negotiations, high (vs. low) need-for-closure decision-makers were more likely to attribute opponents' ambiguous incidental anger to themselves (Hillebrandt et al., 2017). In persuasion contexts, van Kleef et al. (2015) found that only high-epistemic-motivation decision-makers could extract evaluative information from others' emotional expressions to form attitudes.

Rather than directly examining motivation, Chi and Ho (2014) proposed that conscientiousness reflects individual differences in achievement motivation and impulse control, finding that leader negative emotional expression positively influenced follower performance when followers were highly conscientious (Chi & Ho, 2014). Shao et al. (2018) suggested that implicit personality theories influence epistemic motivation: when followers held entity theories, their inferences about leader anger focused more on traits, damaging leadership effectiveness (Shao et al., 2018). Liu et al. (in press) found that proactive service employees were more willing to engage in cognitively demanding information exchange with customers.

5.1.2 Reasoning Ability Observers' reasoning ability is rooted in general intelligence and working memory capacity but is also subject to transient fluctuations from cognitive load and mental fatigue (Lavie et al., 2004). Increased cognitive load weakens cognitive control and systematic information processing capacity. Consequently, individuals under high cognitive load are less likely to thoroughly process others' emotional expressions, making affective reactions

more predictive (van Kleef, 2016).

van Kleef et al. (2015) verified that observers' cognitive load moderates how others' emotional expressions influence attitude formation. When observers possess sufficient cognitive resources for thorough processing, others' emotional expressions more strongly influence attitudes. However, when information processing is chronically low or impaired by cognitive load, emotional interpersonal influence weakens (van Kleef et al., 2015).

5.2 Perceived Appropriateness

The moderating role of appropriateness judgments has received empirical support. For example, when followers perceived leader anger as inappropriate, its negative effect on organizational citizenship behavior strengthened (Konig & van Kleef, 2015), and it could provoke follower anger and deviance (Schwarz Müller et al., 2018). In negotiations, when opponents perceived anger expressions as inappropriate, concessions decreased (Adam et al., 2010) and negotiations were more likely to fail (Yip & Schweinsberg, 2017). When advice recipients perceived emotional expressions as inappropriate, persuasion was hindered (Wang et al., 2015). Numerous studies have explored how situational characteristics, expression content, expresser characteristics, and observer characteristics influence appropriateness judgments.

5.2.1 Situational Characteristics Key characteristics include emotional display rules, culture, and expresser-observer relationships (van Kleef, 2016).

Emotional Display Rules. Display rules are implicit social norms specifying when, how much, and which emotions should be expressed, varying across social and organizational customs (van Kleef, 2016). For example, employees using smiley emojis in formal meeting emails did not increase warmth perceptions but reduced competence perceptions due to inappropriateness judgments; in informal social emails, the opposite pattern emerged (Glikson et al., 2018). Military officers' anger expressions produced negative consequences by violating anti-bullying cultural rules (Lindebaum et al., 2016). Leader anger effects also depend on violation type: anger about integrity violations enhanced leadership effectiveness, whereas anger about competence violations harmed it (Wang et al., 2018). In long-term relationships, strategic anger expression alone is insufficient; only when combined with positive emotional expressions does it promote cooperation and efficiency (Peralta et al., 2020). Timing matters: expressing anger early (vs. late) in negotiations is more likely to be perceived as inappropriate (Yip & Schweinsberg, 2017). In organizational contexts, Homan et al. (2015) found that emotional expressions occurring after (vs. before) team interactions more strongly influenced observers' inferences about future team functioning.

Culture. More specific display rules vary across cultures, fundamentally shaping cognition and behavior (Adam & Shirako, 2013). Given East Asians' collectivistic norms and White Americans' individualistic norms, Adam et al. (2010)

found across three negotiation experiments that East Asians were more likely than White Americans to perceive opponent anger as inappropriate, making them less willing to concede. Due to this stereotype, angry expressions from East Asians (vs. White Americans) actually elicited more concessions from opponents (Adam & Shirako, 2013).

Expresser-Observer Relationship. Adam et al. (2015) emphasized the importance of cooperative-competitive context: anger expressions only increased toughness inferences and concessions in balanced cooperative situations, whereas in predominantly competitive or cooperative contexts, anger provoked hostility without increasing concessions. Another study examined leader-member exchange quality's moderating role: when relationship quality was poor, followers' positive emotions and positive evaluations of leaders more strongly influenced psychological safety (Liu et al., 2017). Among colleagues, poor relationship quality strengthened the effect of recipients' positive mood on speakers' promotive voice (Liu et al., 2015). In customer service, smiley emojis enhanced relationship strength in communal relationships through conscious and unconscious positive affective reactions, but not in exchange relationships (Smith & Rose, 2020).

5.2.2 Expression Content Appropriateness judgments are also influenced by emotional intensity, authenticity, and target (van Kleef et al., 2009). When intensity and authenticity violate situational norms and expectations, they may be deemed inappropriate (van Kleef et al., 2012). Riet et al. (2018) demonstrated across scenarios that rage expressions were perceived as most inappropriate compared to non-emotional disagreement or mild anger. In service contexts, moderate emotional expressions were perceived as more sincere and appropriate than intense happiness or anger (Cheshin et al., 2018). Additionally, van Kleef (2016) noted that expression target influences appropriateness: when observers are also the expression target, certain emotions are more likely to be perceived as inappropriate, triggering negative affective reactions. Unfortunately, no empirical EASI research has yet examined expression target effects.

5.2.3 Expresser Characteristics Research shows that expressers' leadership style, gender, race, power, status, and performance influence observers' appropriateness judgments.

Leadership Style. Leadership style moderates emotional expression effects. When leaders were perceived as abusive, the negative effect of anger about competence violations intensified, while the positive effect of anger about integrity violations weakened (Wang et al., 2018). Yang and Li (2017) examined differential leadership in the Chinese context, finding that for high-efficiency employees, leader emotional dissonance strengthened "insider" employees' affective reactions, whereas for low-efficiency employees, leader emotional harmony strengthened insiders' inferential processing. Wang and Seibert (2015) found that leaders' surface acting frequency moderated the effects of leader positive/negative emotions directed at individual followers: when surface acting was infrequent,

both positive and negative expressions improved follower performance, but when frequent, positive expressions became unrelated to performance. Leaders' mean negative emotional expression frequency also moderated effects: when leaders rarely expressed negativity to the entire team, negative expressions toward individuals could motivate them, but when expressed frequently team-wide, individual-directed negativity became unrelated to performance (Wang et al., 2015). Furthermore, consistency in leaders' transmitted psychological capital across team members moderated the relationship between transmitted psychological capital and leadership effectiveness: leaders with higher consistency were rated as more effective through the mediation of team positive energizing (Rego et al., 2019).

Expresser Gender and Race. Male leaders' positive emotional expression through touch reduced perceived supervisor support (Fuller et al., 2017). Homan et al. (2015) found that in racially diverse teams, others' sadness (happiness) expressions triggered more negative (positive) inferences about future team functioning.

Power and Status. Low (vs. high) power negotiators demanded less when facing opponent anger due to higher risk perceptions (Wang et al., 2012). Powerful negotiators' anger expressions prompted concessions through intimidation, whereas low-power anger expressions provoked proposers' anger, reducing concessions (Lelieveld et al., 2012). In organizations, low-status advisors' emotional expressions reduced persuasiveness (Wang et al., 2015), and low status strengthened the effect of recipients' positive mood on advisors' promotive voice (Liu et al., 2015). While colleagues' pride expressions about others could reverse the negative effects of self-pride expressions, leaders' pride expressions about others did not (Ritzenhöfer, Brosi, & Welpe, 2019).

Performance. Smallfield et al. (2020) found that team task performance weakened the effect of team positive affective tone on leadership behaviors; when team performance was high, leaders' perceived team positive affective tone had weaker effects on abusive and empowering leadership.

5.2.4 Observer Characteristics Observer characteristics (e.g., agreeableness, regulatory focus, power distance) directly influence appropriateness judgments. Chi and Ho (2014) found that leader negative emotional expression positively influenced follower performance when followers were highly agreeable. Interestingly, an earlier student sample experiment found the opposite: when followers were low in agreeableness, leader anger increased motivation and performance; when followers were high in agreeableness, leader anger (vs. neutrality or happiness) increased perceived workload and reduced performance (van Kleef, Homan, et al., 2010). A regulatory focus study found that teacher anger expressions improved promotion-focused students' performance but had no effect on prevention-focused students (van Doorn et al., 2014). In service contexts, prevention-focused (vs. promotion-focused) customers were more sensitive to inauthentic employee expressions, leading to deception inferences and

lower satisfaction (Lechner & Mathmann, 2021). In service failures, high power distance employees compensated less for raging customers due to inappropriateness judgments, whereas low power distance employees compensated more for mildly angry customers when threat perception was low (Glikson et al., 2019). In organizations, when followers had low power distance orientation and perceived low leader power, leader negative emotional expression negatively affected follower performance; the relationship was also moderated by followers' power distance orientation and perceived leader power (Chi et al., 2014).

Based on this analysis, we integrate existing research on emotional social functions, mechanisms, and boundary conditions into a comprehensive framework, depicted in Figure 2 [Figure 2: see original paper].

6 Future Research Directions

Overall, the EASI model has received substantial empirical support. Researchers have progressed from simple application to deeper exploration of mechanisms and contextual variables. However, theoretical development and application remain incomplete.

6.1 Strengthen Systematic Verification of the EASI Model

Observers' reception and decoding of emotions do not occur in a vacuum; they are influenced by contextual factors. For example, anger does not only trigger anger but can also evoke fear (Lelieveld et al., 2012) or anxiety (Schwarz Müller et al., 2018). Anger may be interpreted by negotiators as a signal of tolerance limits, by subordinates as dissatisfaction with their performance, or as abuse (Liu et al., 2017; Shao et al., 2018). Therefore, when examining affective reaction mechanisms, researchers should consider complementary emotions alongside reciprocal emotions. Similarly, observers can make trait inferences (Shao et al., 2018) or situational inferences (van Doorn et al., 2012), requiring careful consideration rather than oversimplification. Furthermore, many studies have not simultaneously tested both mediation mechanisms and both moderators (e.g., Hillebrandt & Barclay, 2017a; Kong & Belkin, 2019; Koning & van Kleef, 2015; Shao et al., 2018). Since affective reactions and inferential processes influence each other and epistemic motivation is affected by contextual factors (Tett & Burnett, 2003), examining only one mechanism may yield inaccurate conclusions. Future research should simultaneously examine both mediating mechanisms and both moderators to deepen understanding of emotional social influence. Additionally, critics have suggested that affective reactions following emotional expressions may be consequences of inferential processing (Smith & Rose, 2020). For example, customers' inferences that service employees are warm may lead to liking. While biometric measures have been used to demonstrate the spontaneity of affective reactions, this possibility cannot be ruled out in certain contexts (Smith & Rose, 2020). Future research should examine whether emotional processing is automatic or controlled and whether the consequences differ.

6.2 Deepen Integration of the EASI Model with Other Theories

Although substantial research has validated the EASI model, most studies adopt a single-theory perspective. Integration with other theories can address complex questions beyond single theories' explanatory power. Indeed, integrative research has begun emerging. For example, Peralta et al. (2020) combined the EASI model with the dual threshold model of anger, finding that strategically expressing anger and happiness in appropriate ways promoted cooperation inferences and individual benefits. Madrid et al. (2019) and Vasquez et al. (2020) integrated the EASI model with interpersonal emotion regulation theory to explore how leader emotion regulation strategies affect team innovation and follower performance. Given that the EASI model focuses on how observers process others' emotions while the modified elaboration likelihood model (Wo et al., 2019) more comprehensively explains how perceptions, attitudes, and behavioral sources are transmitted to influence receivers (Stollberger et al., 2020), Stollberger et al. (2020) combined these frameworks to examine how middle managers perceive executives' emotional expressions and how these perceptions affect lower-level employees. Future research should strengthen organic integration with other theories to advance theoretical innovation and explain complex organizational phenomena.

6.3 Expand Application Contexts of the EASI Model

Current research on emotional social effects primarily examines single emotional expressions in single-interaction contexts (often laboratory experiments). In reality, social relationships are enduring, observers encounter complex and variable emotions, and interpretations are typically based on patterns across multiple interactions. Research has shown that emotional social effects differ between experimental and real organizational settings (Shao et al., 2018). Therefore, we propose six contextual expansions for future research:

- (1) **Examine mixed emotional expressions from the same individual across multiple natural interactions.** For example, abusive supervision and visionary inspiration often accompany negative and positive emotional expressions, respectively. Research shows that when both appear in the same leader, visionary inspiration can mitigate abusive supervision's negative effects on follower performance (Fiset et al., 2019). Many such mixed or contradictory emotional expression phenomena remain unexplored.
- (2) **Examine effects when observers simultaneously encounter different emotional expressions from multiple individuals.** For example, when leaders announce decisions and observers simultaneously detect multiple colleagues' positive/negative emotional expressions, how does this affect observers?
- (3) **Examine effects of repeated emotional changes from the same individual across time.** For example, research shows that customers

who experienced employees' negative displays followed by positive displays showed improved negative emotions (Du & Fan, 2009). More research is needed on observers' reactions to such dynamic, complex emotional expressions.

- (4) **Track long-term social effects of emotional expressions.** Most research has focused on short-term effects, with limited longitudinal investigation (van Kleef, 2016). Studies show that inferences from emotions can persist: negotiators who faced angry opponents made lower demands in subsequent negotiations (van Kleef & De Dreu, 2010). Longitudinal research is needed to examine whether long-term effects differ from short-term effects, what boundary conditions operate, and whether different emotions have different long-term impacts.
- (5) **Examine bystander effects of emotional expressions.** The EASI model focuses on targeted observers' reactions. Only one study has examined non-targeted observers (Heerdink et al., 2019). In reality, we often observe others' emotions as bystanders. Research from this "third-party perspective" is lacking. For example, how does witnessing leader anger toward veteran employees affect newcomers? How does observing executive anger toward one's direct leader affect subordinates? How does watching a restaurant manager berate a server affect customers?
- (6) **Explore applications in new organizational contexts.** With rapid environmental changes, organizations feature new characteristics such as pervasive information communication technologies and pandemic-accelerated virtual teams and remote work (Kniffin et al., 2021). How might the EASI model apply differently in these contexts? Emotional expression includes nonverbal cues like facial expressions, eye contact, and gestures that are limited in remote work. How does remote work affect emotional expression's social effects? What are the new forms and mechanisms of emotional expression in remote work? What are the effects of online expressions (e.g., emojis, virtual symbols)?

6.4 Improve Measurement Methods for the EASI Model

Emotional social effects involve multi-level, multi-factor interactions among intuition, perceptual experience, and environment. Most current research measures affective reactions and inferential processes through subjective self-reports. Future research could employ objective indicators. For affective reactions, researchers could analyze historical materials, such as having independent raters assess the emotional tone (negative/positive/neutral) of text messages in experiments (Cheshin et al., 2011), or use advanced micro-expression recognition technologies (e.g., facial color, eye movement, physiological signals) (Wang et al., 2020). For inferential processes, implicit measures could be used, such as the Implicit Association Test (Greenwald et al., 1998) or lexical decision tasks (Meyer & Schvaneveldt, 1971). Additionally, neuroimaging techniques (e.g.,

event-related fMRI) could provide new perspectives on physiological responses during emotional expression observation. These non-self-report measures may enrich understanding of emotional interpersonal influence mechanisms.

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Note: Figure translations are in progress. See original paper for figures.

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