

White Paper:
Emotional Contagion

WHITE PAPER: EMOTIONAL CONTAGION

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Abstract: Emotions serve to focus our attention on aspects of the world that help us thrive. They provide information about our interior world and about our relationships. For this survival function to operate optimally, we are highly sensitive to emotional signals in the environment. One person’s emotions are affected by others’. This effect is called “Emotional Contagion” and provides important insight into why we must and how to manage emotions for optimal results.

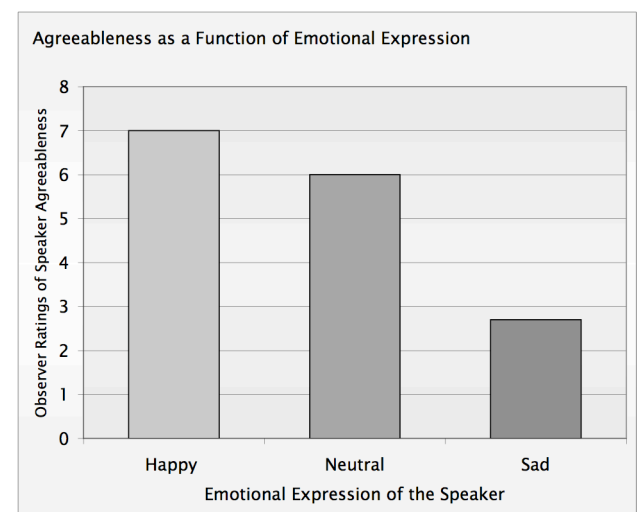
In daily interactions with people at home, work, and in the community, people unconsciously send messages about how they are feeling while simultaneously receiving the emotional messages being sent by others. Recent research has verified that these emotional cues affect each person’s own moods, and in turn, these feelings affect how they perform.

Systems of Mood Contagion

Studies of mood and human behavior have shown that feelings spread from one person to another through a number of mechanisms. For example, factors of non-verbal communication including facial expressions, posture, and specific behavioral patterns have been linked to the transmission of emotional information between individuals [3, 4]. In addition, recent studies have shown that mood can spread through aspects of verbal communication such voice inflection [4].

In a recent study by Neumann and Strack (2000), participants were asked to listen to an emotionally impartial speech read by an actor using happy, sad, or neutral voice inflection. When later asked to rate their emotions, participants reported having emotions consistent with those of the speaker. Furthermore, when asked to rate their attitude toward the speaker, participants consistently liked the speaker with the sad voice least $F(2,26) = 11.08, p < .001$. (See Figure 1)

Figure 1



Not only does audience mood changes to match the speaker – but the mood also affects how much the audience liked the presentation.



This information elicits several questions. First, are humans born with an innate sensitivity to the emotions of others? Some scientists would argue yes. Newborn infants have been shown to physically imitate the facial expressions of their caregivers. While this has been interpreted by some as an indication of instinctual emotional sensitivity [3], others argue that our sensitivity to the feelings of others develops over time and is adapted and perfected with experience [1].

Mood Contagion Within Groups

With clear applications within business, social, and personal settings, mood contagion has become an important class of group dynamics research. In 2002, Sigal Barsade of Yale University examined the effect of emotional contagion within the group context. In her experiment, a trained actor was placed within group contexts and directed to participate in the groups' activities while enacting varying levels of pleasantness and energy. The groups were working to assign pay a pay bonus; they had a fixed amount of money they could spend and had to allocate it based on a set of performance criteria. After the activities were completed, participants were asked to complete self-assessments of their mood. Results of the study clearly suggested that the effect of one group member's emotions had an unconscious affect on the mood of the other group members. This held true both for "positive" and "negative" moods [2].

There are different opinions of the effect of positional power / authority on mood contagion. It may be that those with authority and those who are either liked or respected have a greater effect. What is clear is that leaders affect the group mood:

"In a study of the influence of the contagion of mood of a group leader on group members, the positive mood of the leader positively influenced group members at both the individual and collective level with the opposite for leader negative mood. The leader's positive mood also had a subsequent influence on group coordination and effort" (Sy, Côté, & Saavedra, 2005, as cited in Barsade & Gibson, 2007).

The Effect of Mood

Given that mood is contagious, one important consideration is the effect of mood on performance. Some authors focus on the idea that "positive" moods have a positive effect on performance, but in reality sometimes a "negative" mood is appropriate.



In the Barsade study discussed above, a negative group member seemed disrupt the groups and reduce efficacy, while having a positive confederate was associated with increased cooperation, fewer group conflicts, and heightened task performance. Likewise, in a similar study, Alice Isen (1993) assessed radiologists, finding positive mood enhanced their accuracy. Positive mood has a far-reaching effect on work performance, supervision, decision-making, and even on team members voluntarily acting for the good of the organization [7].

On the other hand, in some situations a “bad mood” is more effective. For example, Elsbach and Barr (1999) found that people in negative moods use a more structured approach to decision-making. Their summary of similar is shown below in Table 1 [6].

Table 1: Findings on the Effects of Positive and Negative Moods on Decision Making

Mood	Potential Benefits	Potential Costs
Positive	<ul style="list-style-type: none"> • Cues positive materials in memory (Isen et al. 1978) • Promotes creative problem solving (Isen et al. 1987) • Promotes more flexible categorization of items (Isen & Daubman, 1984) • Promotes efficiency in decision-making (Isen & Means, 1983) • Promotes thoroughness in interesting tasks (Isen et al, 1991) 	<ul style="list-style-type: none"> • Promotes risk aversion, more negative subjective utility for losses (Isen et al. 1988) • Promotes use of heuristics and quick decision-making (Isen & Means, 1983) • Difficulty discerning weak and strong arguments (Smith & Shaffer, 1991) • Persuaded by peripheral cues (e.g., “expert” label) (Mackie & Worth 1991) • Less likely to use a structured decision protocol completely and correctly (current study)
Negative	<ul style="list-style-type: none"> • Not affected by distractions and engage in more message elaboration (Bless et al, 1990) • Less likely to rely on peripheral cues (Worth & Mackle, 1987) • Motivated to engage in effortful analysis to change situation & mood (Bless et al. 1990) • More likely to use a structured decision protocol completely and correctly (current study) 	<ul style="list-style-type: none"> • Reliance on well-known decision rules (Mano 1992) • Increased pessimism (Wright & Bower 1992) • Increased negative judgments of others (Fiske & Taylor, 1984) • Risk-taking when potential benefits/losses are large (Dunegan et al. 1992)

Excerpted from Elsbach & Barr (1999)



Conclusion:

Given that emotions function to help humans adapt to social situations it makes sense that one person's emotion would affect another's. Just as herd animals would benefit from rapidly passing messages about risk and reward, emotional contagion seems to be adaptive for humans to function in groups. This system can enable a rapid communication of opportunity and risk, mediate a group interaction, and help humans attend to social rules and norms such as maintaining harmonious interaction with a powerful ally.

The evidence that an individual's feelings affect others – and that these feelings in turn affect performance – illustrates the importance of being aware of and managing emotions, especially for leaders, educators, salespeople, parents, politicians, athletes – really any person concerned with their influence on others.

One challenge is that this emotional exchange can occur without conscious attention. In other words, whether they know it or not, people are affecting others. If emotional intelligence allows people to monitor and manage this exchange, developing emotional intelligence will improve people's ability to successfully interact with others.

Authors:

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