On The Role of Affect in Interpersonal Trust

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Abstract

The decisions of whether to trust another person is often influenced by sub-conscious affective reactions. This chapter will describe some of the psychological mechanisms responsible for the biasing effects of affect on trust-related responses in a variety tasks. A series of experimental studies will be presented showing that mild affective states can have a significant influence perceptions of trust, the willingness to believe what others say and do, the tendency to trust interpersonal messages, the ability to detect manipulated information, and the tendency to trust and see meaning in meaningless information. The theoretical significance of these studies will be discussed, and the practical implications of affective influence on trust will be considered.

1. Introduction

Affective experiences penetrate every aspect of our lives, and influence many of our cognitive and behavioral strategies (Fiedler, 2001; Forgas, 2013; Zajonc, 1980; 2000). In a sense decisions about trust, however important, are just another class of social judgments, and so we may expect affect to also have an important effects on such decisions. For example, could a happy mood predispose people to be more trusting, and conversely, could negative mood function as a subconscious warning signal, producing a more cautious and less trusting reaction? We do know that human judgments are deeply influenced by various subcortical influences originating in the a-rational regions of our brain (Goel, 2022; Forgas & Eich, 2013). This chapter will review a range of experiments indicating that mild, everyday moods can have a marked influence on trust judgments.

1.1 Trust vs distrust

The unique human ability of symbolic consciousness and representing the inner states of others as well as ourselves (mentalising) is one of the most remarkable evolutionary achievements of our species (Harari, 2014; von Hippel, 2018). Most meaningful social relationships as well as larger scale social organisation is based on our unique human capacity to trust others. But there is also a significant cost and vulnerability and indeed, irrationality associated with this remarkable cognitive ability to trust others and to treat mental representations about expected future behaviours as reality. Trust judgments by definition are underjustified and involve great uncertainty, and incorrect judgments may occur when shortcomings of information processing, combined with often misleading social influences and direct manipulation may produce mistaken trust judgments. As we saw in chapter 1, this is a very frequent occurrence in politics as well in commerce when advertising, marketing and persuasive messages mislead us to trust manipulative information.

Throughout human history, people often placed their trust in false beliefs and false prophets following often delusional narratives such as belief in witches, magic potions, exorcism and human sacrifice. Many such trusted but false beliefs are still common today and accepted even by highly educated people (eg. Marxism, critical race theory, postmodernism, etc. see Forgas & Dunbar, in press)). Conspiracy theories, alternative therapies, pyramid schemes and miracle cures and diet fads are still a matter of trust for

many people. In everyday life, knowing wo and what to trust, and what to distrust remains a challenging cognitive task. Rejecting valid information about trustworthiness as false (excessive scepticism) is just as dangerous as accepting invalid information about dubious claims as true (excessive gullibility.

1.2 Affect and Trust Judgments

Throughout human history, affect has long been considered a major source irrationality and bias in judgments, a more primitive faculty unworthy of humans (Plato, 1947). Many great philosophers ever since antiquity such as Plato, Aristotle, St. Augustine, Descartes, Pascal, Kant and most recently Freud considered affect to be a primitive and invasive but sovereign human faculty that can subvert human reason (Hilgard, 1980). As Pascal argued, "the heart has its reasons which reason does not understand" (Pascal, 1643/1966, p. 113). Social theorists such as Machiavelli who were in the business of manipulating trust identified affect as a powerful subversive influence on effective thinking and he proposed elaborate schemes to exploit this human weakness for political gain (Machiavelli, 1961). Not surprisingly Machiavelli anticipated much of what passes for everyday political practice today and not only in autocratic dictatorships. Nations like Hungary, where the Western values of democracy have not yet taken deep root (Albright, 2018; Forgas, Kelemen, László. 2015) have been turned into autocracies by the skilful political manipulation of voters' trust (Forgas, 2024). Similar processes are also observable in Western nations including the US where blind trust has motivates many MAGA followers.

Philosophers were not alone in their suspicions about emotionality. Psychologists have also often assumed that whenever emotions are "directly involved in action, they tend to overwhelm or subvert rational mental processes" (Elster, 1985, p. 379). Psychoanalytic theories in particular were especially influential in in casting affective states as part of the unconscious, "noisome, irrational agents in the decision-making process" (Toda, 1980, p. 133). Attempts at controlling our feelings often produced paradoxical effects – for example, Feshbach and Singer (1957) found that attempts to suppress fear "facilitates the tendency to project fear onto another social object" instead (p. 286). The worrying and recurring patterns of irrationality often leading to bloody intra-species violence throughout human history was seen by some writers as evidence of a fatal emotional flaw in the evolution of our species (Koestler, 1978), due to the poor structural integration between the archaic emotional and more rational neocortical structures of the brain.

More recently, an alternative view of emotionality has emerged within the evolutionary psychology literature suggesting that affective states can also serve as a useful and adaptive purpose as input to effective social thinking (Damasio, 1994; de Sousa, 1987; Oatley & Jenkins, 1996). In many recurring everyday situations, affect may function as an effective evolutionary signal fine-tuning how people respond to more or less demanding situations. In a similar way, affective states may influence judgments about trust by subconsciously cueing positive or negative expectations about the expected future behaviour of others 9valence effects), as well as by regulating the information processing strategies people adopt in more or less problematic situations. So what are the psychological mechanisms that might link affect to trust judgments? We shall turn to this question next.

2. **Affect Infusion: How affect may influence trust**

There are two cognitive mechanisms that are responsible for the infusion of affective states into thinking and judgments: (1) *informational valence effects* (influencing the content and valence of cognition), and (2) *processing effects* (influencing the process of cognition). According to the first process affective states can produce an *affect-congruent* influence on judgments by selectively and often subconsciously promoting affectively congruent ideas to influence judgments (Bower, 1981; Forgas & Eich, 2013). The second process occurs when affective states regulate the kind of *information processing strategies* people adopt in social situations (Bless, 2001; Bless & Fiedler, 2006; Fiedler, 2001; Forgas,1994; 2002).

Surprisingly, the role of affect in trust judgments has received little prior attention. For our purposes, affect may be defined as mild, non-intensive and often subconscious feeling states are distinct from discrete emotions that are more intense and have definite cognitive content. Such mild feelings states tend to have more subtle, enduring and reliable effects on thinking and behaviour than do more intense emotions that highly conscious and produce context-specific reactions (Goel, 2022). We are more interested here in feelings or moods, although moods are often used in more specific social contexts (Forgas, 1995; 2002; 2006, 2013).

2.1 **Affect congruence: Informational effects.**

Trust judgments may be influenced by affective states being either directly used to infer a valenced reactions (Schwarz & clore, 1981), or by electively priming the accessibility

of positively or negatively valenced thoughts in memory (Bower, 1981; Forgas, 1995). Thus positive mood should promote more positive, trusting ideas, and negative mood should facilitate more negative and sceptical evaluations and less trust. Consistent with this model, numerous studies found a mood-congruent bias in various memory and social judgmental tasks (Bless & Fiedler, 2006; Fiedler, 2001; Forgas, 1994, 1995; Forgas, Bower, & Krantz, 1984; Niedenthal, Halberstadt, Margolin, & Innes-Ker, 2000). When the judgments do not require open-ended processing the prevailing affective state may be directly used as a *heuristic cue* to infer a response (Clore, Schwarz, & Conway, 1994; Schwarz & Clore, 1983).

Integrative theories of affect and cognition such as the Affect Infusion Model (AIM; Forgas, 1995, 2002) predict that direct affect congruence in our judgments should be greatest when more open, elaborate, and constructive processing is required to perform a more complex and demanding or novel cognitive task where no prior reactions are accessible, as is the case with most trust judgments. Because trust judgments necessarily require going beyond the information given (Bond & DePaulo, 2006; Kraut, 1980; O'Sullivan, 2003), they should be especially sensitive to affect infusion (Fiedler, 2001; Forgas, 1995; 2002). Accordingly there should be a marked mood-congruent bias in trust judgments: people experiencing positive affect should be more trusting, and those in negative affective states less trusting compared to a no affect condition.

2.1 Affective tuning: Processing effects of Affect.

Affective states also influence how information is processed (*processing effects*). Negative mood may function as a mild evolutionary alarm signal, indicating unfamiliar and potentially risky situations triggering a more attentive, detailed and systematic processing style with greater attention to new, external details. Positive affect in turn signals safety and familiarity, promoting a more superficial, heuristic, and generative processing style with greater focus on pre-existing information and less attention to new external details (Bless, 2001; Bless & Fiedler, 2006; Fiedler, 2001).

According to this model, negative affect should produce more careful, thoughtful and even sceptical processing and result in less trusting judgments and the better detection of manipulative or deceptive information (Forgas, 2022, 2024; Bless & Fiedler, 2006). Negative affect should also produce greater attention to new information, resulting in longer processing latencies (Bless, 2001; Forgas, 2007; Fiedler, Fladung, & Hemmeter, 1987), with a reduction of judgmental errors (Forgas, 2011; 2013) and better memory for incidental

details (Fiedler, Lachnit, Fay, & Krug, 1992; Forgas, Vargas & Laham, 2005). In contrast, positive affect should trigger more superficial, simple and less externally focussed and less attentive processing producing more trusting judgments, and a weaker ability to detect false or misleading information. The series of studies reported here summarise evidence confirming these expectations.

3. Happy and trusting: Affect congruence in trust-related judgments

Trust is ultimately based on our observation and expectation of how other people will behave. It is always a judgment involving uncertainty and going beyond the information available, as future actions are inherently unpredictable, so the meaning and significance of observed actions is often a matter of interpretation and inferences. Even a simple facial expression such as a smile may be interpreted as either positive, friendly, or negative, condescending or manipulative. Several experiments confirm the influence of affect on such trust related inferential judgments.

3.1 ffective influences on interpreting social behaviour.

Affective states may come to influence trust judgments by selectively promoting access to positive or negative contents from our memory to interpret observed behaviours (Bower, 1980). One of the first studies to demonstrate this effect was carried out at Stanford University (Forgas, Bower & Krantz, 1982) where participants engaged in a videotaped conversation with an interviewer and another student. The encounters were manipulated by the experimenter to produce formal-informal and intimate-non-intimate episodes in order to create a range of realistic situations. The next day, participants came back and they were experimentally induced into either a positive or e negative affective state using a well-established hypnotic affect induction procedure. Next, they viewed the videotape of their encounter the day before and were asked to register every time they perceived the actors performing either a positive, skilled or a negative, unskilled or manipulative behaviour.

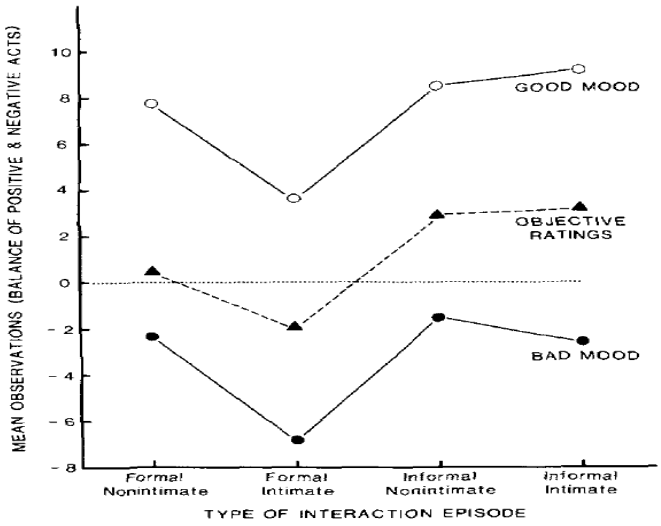

Figure 1. Affective bias in how observed actual social behaviours are interpreted: The same recorded interaction is rated more positively in a positive affective state, and more negatively in a negative affective state (After Forgas, Bower & Krantz, 1984).

This frequency measure was intended as a direct index of affective influences on inferred behaviour evaluation. A strong affective bias was found: participants 'saw' far more positive, skilled behaviours when in a positive affective state across all four different encounters compared to objective raters, and more negative, or problematic behaviours when in a negative affective state. This confirms a fundamental affective bias in how ongoing social behaviours are evaluated, with positive affect increasing positive assessment.

3.2 Can I trust you ? Affective influences on trusting communications.

Judgments of trustworthiness are often based on focusing on nonverbal signals such as facial displays (Forgas, 1985). When suspecting a lying child, mothers often ask them to 'look into my eyes' because deceit is more easily detected from hard to control nonverbal cues – 'nonverbal leakage' (Argyle, 1988; Jones, 1964). Facial expressions especially important in trust judgments as they are cross-culturally universal in communicating emotions, attitudes, and motivational states (Darwin 1872; Ekman, Friesen & Ellsworth, 1972). But facial expressions may also be faked, and discriminating between trustworthy, honest and deceptive displays is difficult and usually performed at a level only slightly above chance (Bond & DePaulo 2006; Kraut 1980; Levine et al., 1999).

Can affective states influence their perceived trustworthiness of nonverbal expressions? In one relevant experiment by Forgas and East (2008b) affect was induced by positive or negative feedback about performance on an unrelated prior task, and participants then rated the perceived trustworthiness and genuineness of positive, neutral and negative facial expressions by professional actors. We found a significant affective influence on trust as judges in a positive affective state were far more likely to trust facial expressions and were also more confident than those in the negative condition (see Figure 2).

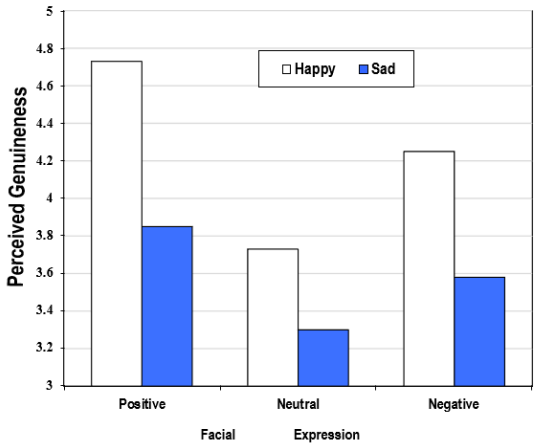

Figure 2. affective influences on trusting the genuineness of facial expressions: positive affect increases, and negative affect reduces trust and credulity for positive, neutral and negative expressions alike (After Forgas & East, 2008b).

Subsequently, using a similar procedure, we also looked at mood effects on trusting highly specific emotional displays (Ekman & Friesen, 1974; Darwin, 1872). Happy and sad participants viewed six photographs showing actors displaying the basic emotions of happiness, anger, sadness, disgust, surprise, and fear. Judges were asked to identify the emotion communicated and also assess its trustworthiness and genuineness. Affect again had a significant effect on trust judgments as negative affect reduced trust across all emotional expressions (Figure 3). These results show that negative affect can significantly reduce the tendency to trust the veracity of nonverbal expressions across the range of emotions communicated. This robust effect suggests that trust is more likely to be compromised in real-life situations where people are influenced by negative affective states.

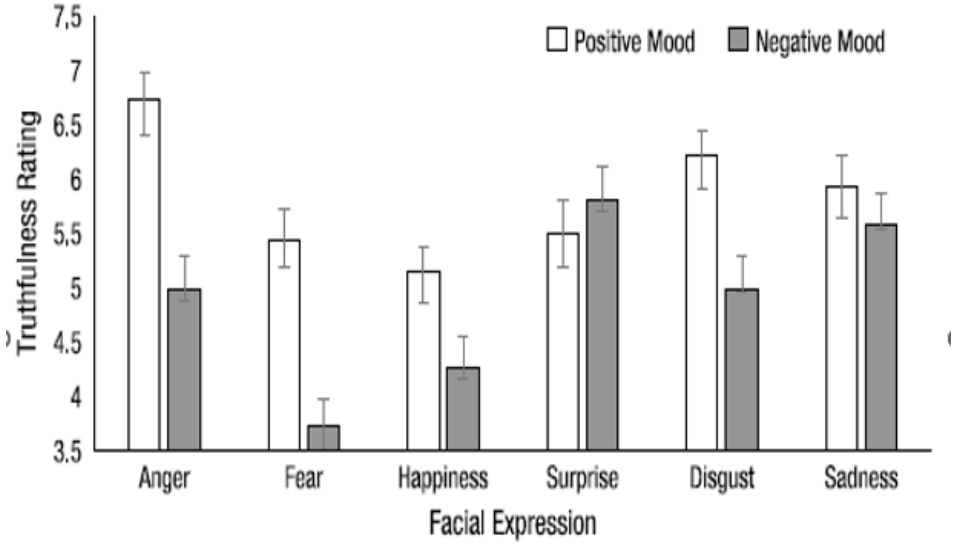

Figure 3. affective influences on trusting six basic nonverbal expressions (after Forgas 78 East, 2008, b).

3.3 Affect and trust in relationships: Happy and trusting?

Can such affective influences also impact on how we experience trust in important real-life relationships? Forgas, Levinger and Moylan (1994) in two experiments investigated this possibility. Experiment 1 found a significant affective bias in how well-established intimate relationships were evaluated by people in a real-life field setting. Irrespective of the length of the relationship, those in a positive affective state formed more positive and trusting evaluative judgments about the relationships (Figure 4). A second experiment replicated this finding in a controlled laboratory experiment and found that evaluations of the relationship and the partner, as well as preferred styles of conflict resolution were all significantly influenced by the respondents' experimentally induced affective state, irrespective of relationship duration. These results further confirm that affective states can play a crucial role in infusing trust and commitment in relationships with a clear tendency towards affect-congruent evaluations.

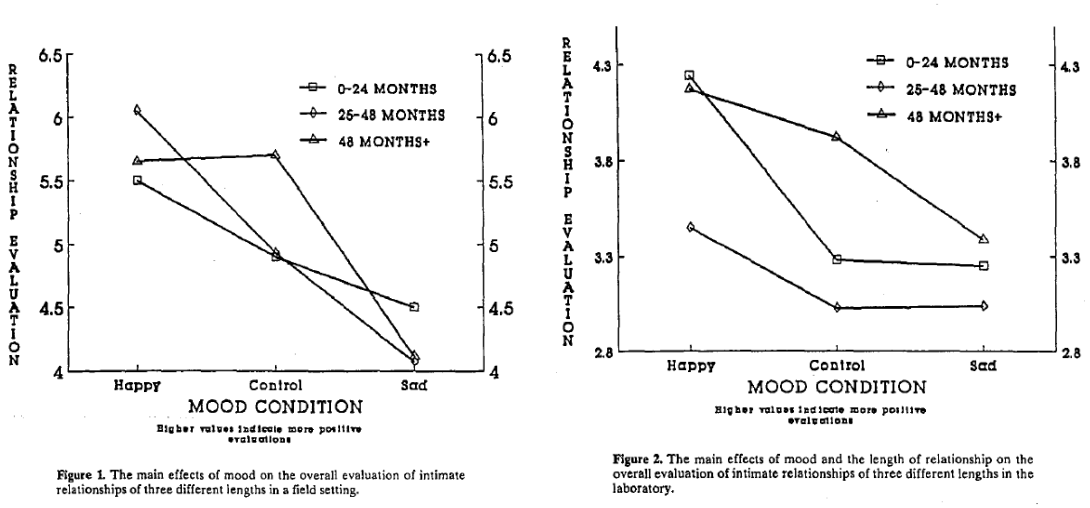

Figure 1. The main effects of mood on the overall evaluation of intimate relationships of three different lengths in a field setting.

Figure 2. The main effects of mood and the length of relationship on the overall evaluation of intimate relationships of three different lengths in the laboratory.

Figure 4. Affective influences on relationship evaluations and trust: Positive affect leads to more prositive assessments both in a field setting (left) and in the laboratory (right; after Forgas, Levinger & Moylan, 1994).

3.4 Managing relationship conflicts

Partners in long-term, intimate relationships inevitably face conflicts that may shake their trust in the relationships. Much depends on how they attribute (mentalise) the causes of conflict. Can their affective states also influence these reactions? In one study (Forgas, 1994) we explored affective influences on how people explain more or less serious relationship conflicts (Figure 5). Three experiments with a total of 306 Ss found that induced affective states produced a major effect on how conflicts were explained. Partners in a negative affective state were more likely to attribute internal, stable and global causes for the conflict, with potentially more serious consequences for their trust in the relationship. Exp 3 replicated these findings in the laboratory and also found reaction time (RT) data showing that longer processing recruited by more serious conflicts actually accentuated these affect-priming effects, as predicted by models like Forgas' (1995) Affect Infusion Model. These results again indicate that transient everyday affective states are likely to have a significant affect-congruent influence on the way trust in relationships is evaluated, with negative affect representing a greater danger for the experience of trust in the relationship. These experiments provide direct evidence for the important role that affective states play in the experience and stability of trust in real-life relationships. Even judgments about personally important intimate relationships are highly influenced by affect infusion especially when a more extensive processing strategy is used, a pattern we shall explore further in the next section.

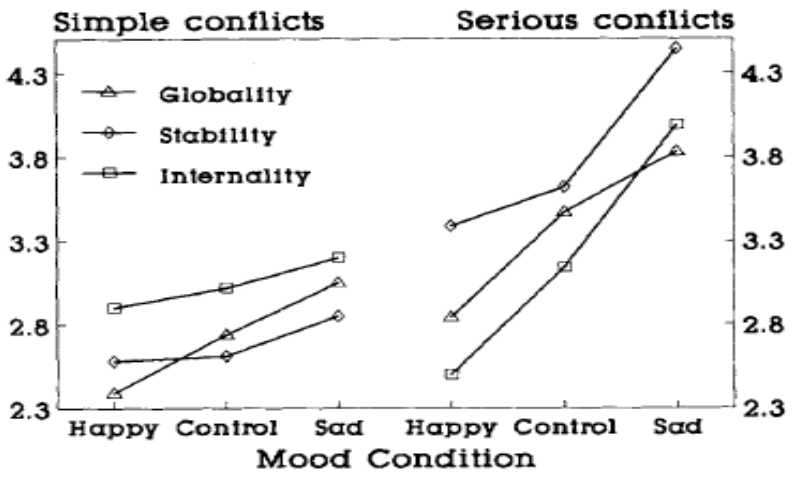

Figure 5. The effects of happy, control, and sad mood on attributions to internal, stable, and global causes for simple and serious conflicts: Negative affect reduces trust by promoting more critical explanations, especially for serious conflicts (After Forgas, 1994).

3.5 Affective influences on trust in strategic behaviours.

Mild affective states and feelings also appear to have a significant effect on how people approach and perform in complex strategic interpersonal situations, such as negotiations. In a series of experiments (Forgas, 1998c) we found that people induced into a mild positive feeling state were significantly more likely to trust others both in interpersonal, and in integroupd negotiating tasks, by being more cooperative, and more willing to make deals. In contrast, negative affective states increased the tendency for competitive negotiating srategies (Figure 6).

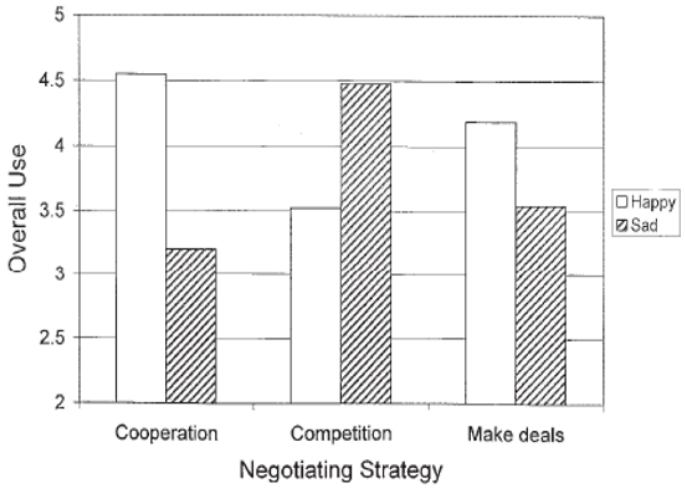

Figure 6). The effects of positive and negative feelings on strategic negotiation: Positive affect promotes cooperation and making deals, and negative affect promotes more competitive strategies (After Forgas, 1998c).

Conceptually similar effects were confirmed in another series of experiments evaluating the influence of induced affective states on another important strategic behaviour involving trust: self-disclosure (Forgas, 2010). In these experiments, participants were induced into a positive or negative feeling states before interacting with another person. An analysis of their interpersonal strategies and especially their trust and ability to disclose about themselves was evaluated, showing that those in a positive feeling state were significantly more likely to disclose more intimate, more abstract and general, more positive and also a greater variety of information about themselves (Figure 7).

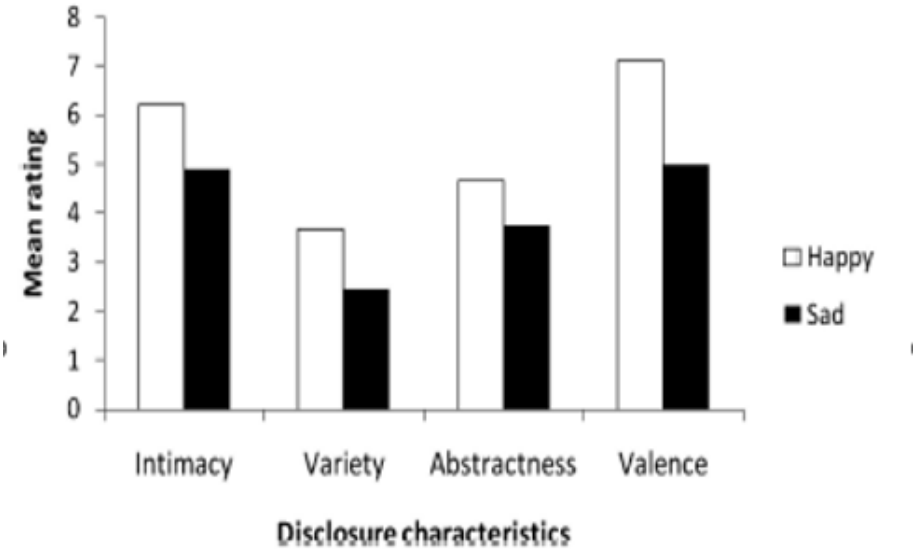

Figure 7. The effects of induced positive and negative feeling states on self-disclosure intimacy, variety, abstractness and valence (After Forgas, 2010).

4. Affective influences on processing trust related information

4.1 Detecting manipulation.

Given the fragile nature of trust judgments and our general vulnerability to manipulation, affective influences on information processing can play a particularly important role in promoting or reducing scepticism about received information. We found that induced negative mood produces a significantly more attentive processing style,

increasing processing latency both in the encoding of social information, and when producing social judgments (Forgas & Bower, 1987; Figure 8).

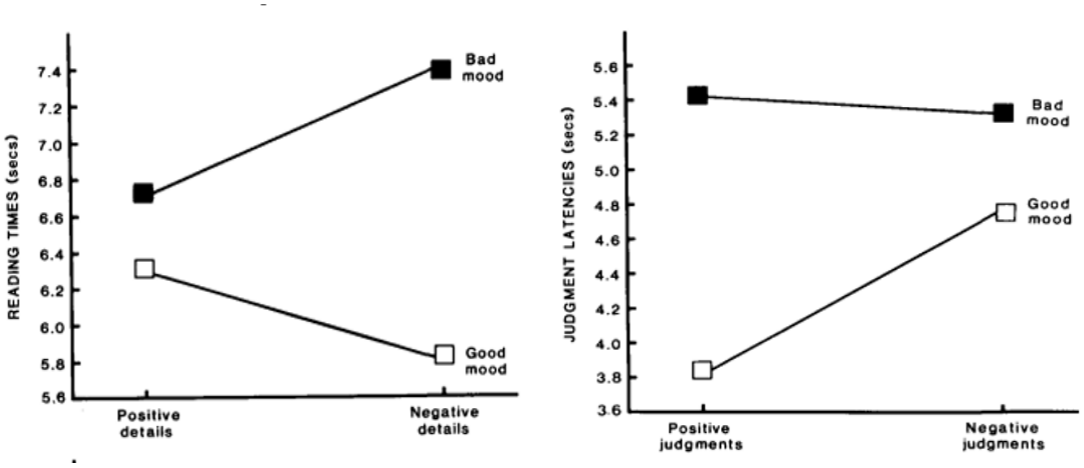

Figure 8. The effects of induced mood on the time taken read and encode information about others (left), and the time taken to produce social judgments (right): negative mood significantly increase processing latency and attention (after Forgas & Bower, 1987).

Perhaps the most basic example illustrating how feelings may influence processing attention is the way people trust or distrust ambiguous or even meaningless information. Determining whether verbal or visual information we encounter should or should not be trusted as meaningful is one of the more difficult and cognitively demanding tasks human beings face in everyday life (von Hippel, 2018; Pinker, 2014). Does affect play a role in people's ability to detect such manipulative communications?

The consequences of misplaced trust due to delusional ideologies was demonstrated in a series of hilarious hoaxes when genuine scientists submitted intentionally meaningless nonsense papers to academic social science and humanities journals that were then readily published. This is an almost perfect illustration of how trust can be abused when the information is meaningless, yet recipients are intent on seeking confirmation of their pre-existing delusional beliefs. Within the social sciences, trust in the reliability and validity of the scientific process is not based on factual information, but on the shared ideology of often deluded academics. Trust in this entire post-modernist literature has now been seriously eroded by a number of confirmed examples when intentionally meaningless texts

have been submitted to 'reputable' social science journals masquerading as science and were eventually published.

Alan Sokal's "grievance studies affair" and a larger-scale hoax perpetrated by Peter Boghossian, James Lindsey and Helen Pluckrose showed that intentionally nonsensical articles with woke ideological messages such as "*The conceptual penis as a social construct*", "*Stars, planets and gender: A framework for feminist astronomy*", "*My struggle to dismantle my whiteness*", "*Grappling with hegemonic masculinity"*, *"Agency as an elephant test for feminist porn" and "Queering Plato"* can find ready acceptance when editors trust and share a delusional world view. The fact that leading humanities and social science scholars accepted such nonsense as science makes them no less ridiculous than followers of the QAnon cult who see a satanic conspiracy in a pizza parlour.

In a now famous hoax the physicist Alan Sokal submitted an intentionally meaningless text to a post-modernist theoretical journal to investigate whether a leading North American journal of post-modern cultural studies would publish an article liberally salted with nonsense if (a) it sounded good and (b) it flattered the editors' ideological preconceptions (Sokal, 2006). The article was duly accepted and published (Sokal, 1994). When Sokal subsequently revealed the hoax, it became obvious that in many academic departments in the humanities and social sciences trust was based on ideology and not reality so that meaningless verbiage can be passed off as science as long as it fits the delusional narrative of the editors. The psychology of this process was recently explored in a study 'On the reception and detection of pseudo-profound bullshit' by Pennycook, Cheyne, Barr, Koehler and Fugelsang (2015, p. 559) confirming the same effect: trusting people will often accept vacuous, pseudo-profound "bullshit" text as potentially meaningful.

In a recent study we examined the possibility that induced mood can influence bullshit receptivity (Forgas, Matovic, & Slater, 2024; Figure 9). We asked participants in an induced positive or negative affective state to rate the meaningfulness, trustworthiness and profundity of two kinds of verbal 'bullshit' text. The first kind, New Age bullshit was taken from a spoof website randomly combining words from the banal pronouncements of Deepak Chopra: http://wisdomofchopra.com (e.g., "Imagination is inside exponential space time events" and "Good health imparts reality to subtle creativity"). Another source of bullshit was meaningless psychological jargon constructed by randomly combining various

psychological jargon words (Forgas, 1985). We were interested in exploring if induced affect can actually influence the perceived validity and trustworthiness of such nonsense information.

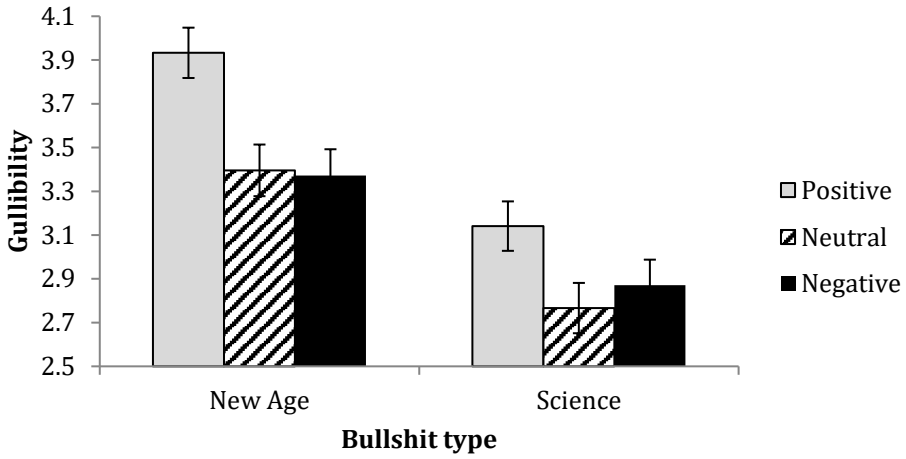

Figure 9. Means and standard errors for affective influences on trusting the meaningfulness of nonsense statements featuring meaningless New Age jargon and scientific jargon claims.

Affect indeed had a highly significant influence. Those in a positive affect were more trusting and saw more 'meaning' than those in the neutral and negative affect conditions (see Figure 1). Gullibility was also significantly greater for New Age sentences than for scientific jargon terms, although the affect × nonsense type interaction was not significant, indicating a relatively uniform and content-independent effect on trust. Response times and memory data confirmed that these differences were linked to the predicted processing differences triggered by affect. Positive affect resulted in faster and more superficial processing and poorer subsequent memory for details of the text. A d' analysis also confirmed that participants in the positive affect condition were significantly less able to discriminate between correct and misleading information than those in the negative mood condition (Bless & Fiedler, 2006).

Paradoxically, more trusting participants were also more confident in their responses, $r(79) = .23$, $p = .036$, and rated self-confidence mediated their ability to detect bullshit. It also seems that judges had little insight into their affectively induced biases as positive affect was associated with *greater* self-confidence and ultimately, also greater gullibility (Bower, 1981; Forgas, 1995; Schwarz & Clore, 1983). Considering these results together suggest that positive affect reduced detailed processing and accordingly increased people's vulnerability to trusting and accepting nonsensical information as possibly useful.

4.2 Affect and trusting your own eyes: Seeing something where there is nothing?.

Trusting confusing visual information as possibly meaningful rather than dismissing it as meaningless is also a common everyday task we all face. When you see images showing what may appear random patterns of shapes and colours do you tend to trust it as containing some potential meaning, or dismiss it out of hand as children's scribblings or computer generated random images, or even modern art? In one recent study, we asked participants in public places who received a prior mood induction (reminiscing about positive or negative life episodes) to judge the meaningfulness of four different examples of complex visual images. The target images were four abstract expressionist paintings taken from internet sites (for example, by Jackson Pollock, and others; Forgas & Matovic, 2018). A clear affective influence on trusting the images and inferring some meaning was found (Figure 10). Once again, participants in a positive affective state were significantly more likely to trust the images and perceive meaning compared to those in a negative affective state.

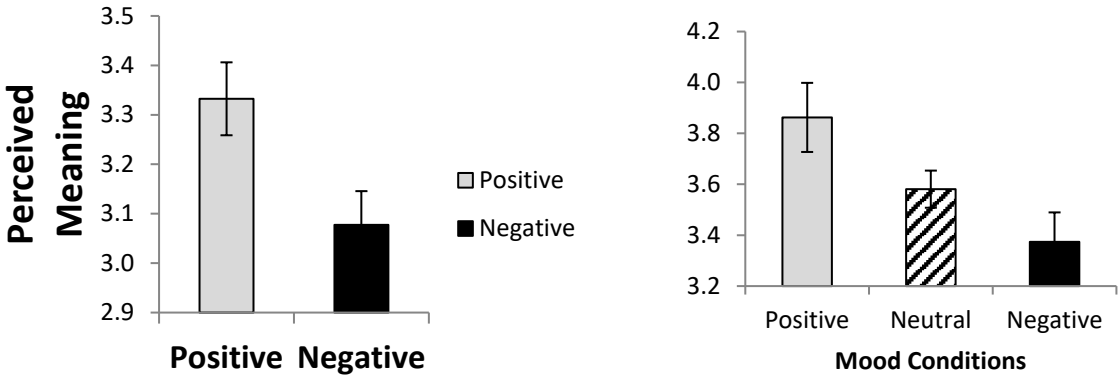

Figure 10. Means and standard errors for affective influences on trusting the meaningfulness of abstract expressionist paintings in a field study (left; N= 170) and in a laboratory study (right; N=55).

These experiments provide convincing evidence for affective influences on the human tendency to trust even information with no obvious meaning. One might argue that abstract paintings still provide some actual ground to be trusted to convey some real

meaning – but would these affective influences also occur when people look at totally meaningless and intentionally vacuous random images? This was investigated in a follow-up experiment that could be interpreted as an examination of affective influences on the projection of pure trust (Figure 11).

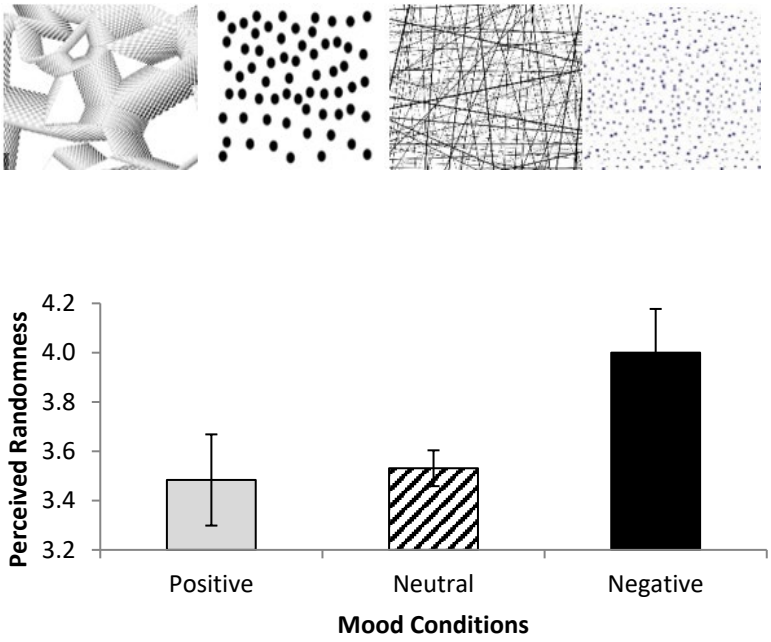

Figure 11. Means and standard errors for affective influences on trusting that random spatial patterns actually convey some meaning – those in a negative affective state are least likely to infer meaning..

4.3 Affective influences on Detecting Deception

Given that trust is such a valuable commodity in our socially interconnected world, there are many attempts to manipulate trust judgments by deceitful communicators. So just how good are people in detecting deception, and does their affective state influence their judgments? Detecting deceitful communication is a demanding cognitive task and can be particularly difficult when facing intentional deception by others (cf. Lane & DePaulo, 1999), and many such situations occur in affectively charged contexts, such as when evaluating the trustworthiness of a romantic partner, a friend, a child or an employee.

Past research suggests that people are often overly trusting and are not very good at detecting deception (Bond & DePaulo, 2006; Ekman & O'Sullivan, 1991; Levine, Park, &

McCornack, 1999; see also Mayo; Strack; Krueger et al., this volume). Many people also hold incorrect naïve theories about cues to deception, and focus on the wrong behaviours to detect lies (Fiedler, 1989; Fiedler & Walka, 1993). The confirmation bias, the correspondence bias, the ‘‘truth bias”, and the implicit tendency to trust others further compromise our detection efficacy (McCornack & Parks, 1986; O’Sullivan, 2003).

Several of our experiments now suggest that positive affect tends to reduce attention to external cues by triggering more superficial processing strategies and so increase our vulnerability to many judgmental biases such as the correspondence bias (Forgas, 1998) and various judgmental heuristics (Forgas, 2022). In one series of experiments (Forgas & East, 2008a,b) we predicted that negative affect should reduce vulnerability to deception in trust judgments, as dysphoria should recruit more externally attentive and focused processing (Forgas, 1995, 2002; Forgas et al., 1984).

In one experiments (Forgas & East, 2008a), participants viewed affect-inducing films, and then watched video clips of males and females who were either truthful or deceptive in denying an alleged theft, and judged the target’s trustworthiness, guilt or innocence, and their truthfulness (Figure 12). Half the videotaped targets were actually truthful in denying the theft, and half were deceitful, and they were highly motivated to be convincing by the promise of free movie tickets if their claims are believed. We found a significant affective influence on judges ability to distinguish between trustworthy and untrustworthy statements: those in a negative affective state were far better in detecting untrustworthy denials by guilty communicators (see Figure 3), while those in a positive or neutral state were more trusting and credulous and were less able to discriminate between innocent and guilty targets. Overall, detection of deception was significantly better than chance only by those in negative mood, whereas neutral and happy mood participants did not detect guilt above chance level.

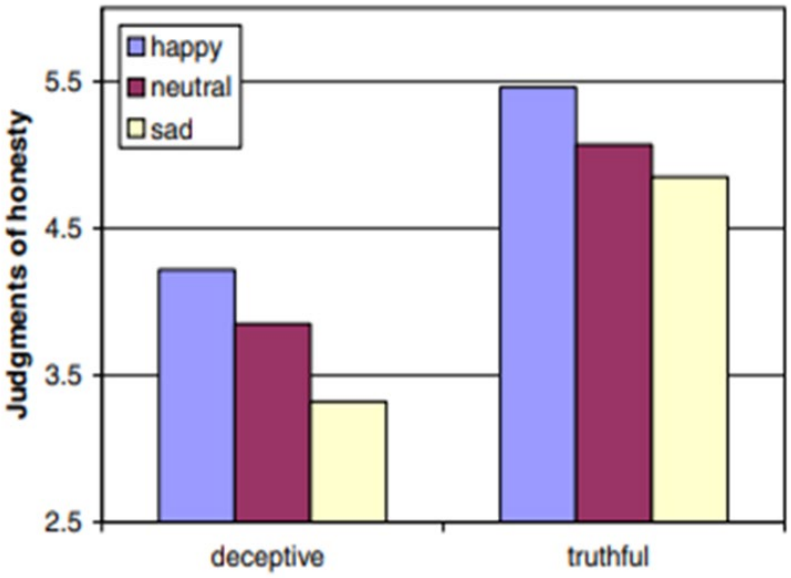

Figure 12. The effects of affective state on trusting truthful vs deceptive communications; Negative affect significantly improved the detection of deceptive denials (judgments of guilt; after Forgas & East, 2008a).

4.4 Affect and trust in fake news and urban myths.

Most everyday information we come across in our anonymous mass societies is second hand and not necessarily trustworthy. Thoroughly investigating every claim would be beyond our time and cognitive resources and so is inherently impossible (Fiedler & Wänke, 2009), so we must rely on various simple heuristics to decide whether to trust or distrust new information. Affective states may play a crucial role in how we make such trust decisions. In one experiment we investigated the role of induced affective states on the tendency for people to trust a variety of more or less plausible fake news and urban myths (Koch & Forgas, 2012). Some previous research suggests that more easily processed and *cognitively fluent*

Information is more likely to be trusted and accepted as true – the so-called *truth effect* (Begg, Anas, & Farinacci, 1992; Reber & Schwarz, 1999; Unkelbach, 2006; Dechêne, Stahl, Hansen, & Wänke, 2009). The subtle experience of cognitive fluency may be determined by a variety of factors, such as familiarity, frequency, or even the visual clarity of the information (see Alter & Oppenheimer, 2009; Unkelbach, Bayer, Alves, Koch, & Stahl, 2011). However, the fluency effect can also be readily discounted when people adopt a more elaborate and attentive processing style (Hawkins, Hoch, & Meyers-Levy, 2001). We

expected in this study for negative affect to trigger a more attentive thinking style, reducing the influence of fluency cues, and also produce a less trusting and skeptical evaluation of the dubious messages assessed (Bless & Fiedler, 2006; Forgas, 1998; 2010; 2011).

Participants first received an affect induction (viewed positive or negative film clips) and then judged the trustworthiness and truth of 30 ambiguous 'fake news' and 'urban myth' type statements presented with either high or low perceptual fluency (high or low contrastive background; see Reber, Winkielman, & Schwarz, 1998). The 'urban myths' included ten *neutral* claims (e.g., "Instead of iron, horseshoe crabs have copper in their blood"), ten *positively valenced* claims (e.g., "Gelotology is the study of laughter and its beneficial effects on the body"), and ten *negatively valenced* claims (e.g., "The suicide rate in Nunavut is four times higher than in the rest of Canada"). Within each valence category, five statements, although highly obscure, were actually true, and five statements were factually false.

Fluently presented urban myths (high contrast script) were judged as more trustworthy than disfluent myths, negative affect actually reversed this fluency effect consistent with other evidence that negative affect can reduce or eliminate the kind of simplifying heuristics people often employ in their everyday judgments (Forgas, 2022). We also found support for the prediction that negative affect recruits more detailed processing as indicated by significantly longer processing latencies.

Thus, positive mood maintained, but negative mood eliminated the heuristic reliance on visual fluency as a subliminal truth cue when evaluating urban myths. Such affective influences on truth judgments may also be important in real-life truth judgments (such as believing or disbelieving one's partner) that usually occur in affect-rich contexts (Ciarrochi, Forgas, & Mayer, 2006).

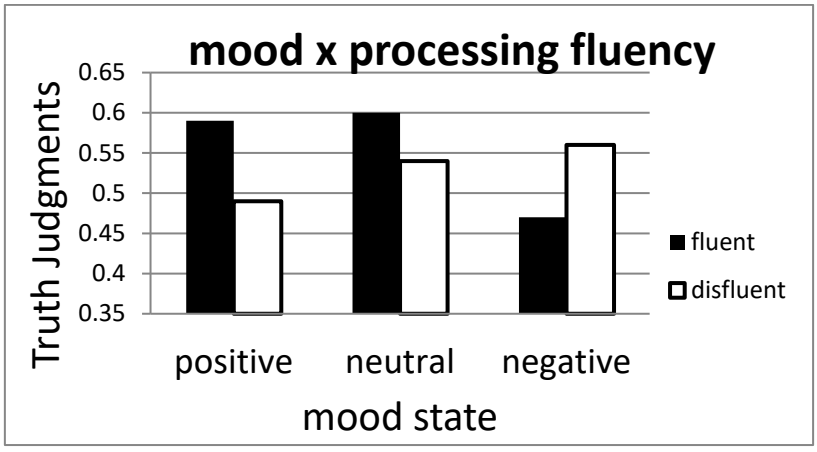

Figure 12. The interactive effects of mood and fluency on truth judgments: positive mood maintains, and negative mood reduces reliance on fluency as an indicator of truth (After Koch & Forgas, 2012).

4.5 Affect and memory distortions

Trust may also be influenced by biases in how we remember past experiences, and affect has been shown to play an important role in such memory biases. It is now well established that even eyewitness memories are easily contaminated by subsequent misleading information, a form of reconstructed 'fake memory' that may enduring consequences (Loftus, Hoffman & Hunter, 1989). A series of our studies (Forgas, Laham & Vargas, 2005) investigated the effects of positive and negative mood on the reliability of eyewitness memories for personally observed events, and especially people's tendency to incorporate later, misleading details into their recall. We did find that negative mood, by triggering a more detailed, extensive and slower processing style reduced the tendency to to incorporate misleading information into memory for complex events. In fact, negative mood almost completely eliminated the familiar "misinformation effect" (Loftus et al., 1989). This should have important implications for trust judgments by preventing memory bias and contamination that often plays a role in such experiences.

In another experiments, students in a lecture hall witnessed a staged and apparently incident between a lecturer and a female intruder. A week later, they received a positive or negative affect induction and their memory for the episode was tested while they also received misleading information about what actually happened embedded in misleading questions (eg. 'Did you see the intruder in the brown coat?' – in fact there was no brown coat). Negative affect produced slower and more attentive processing and provided an almost complete defense against confusing correct details with misleading suggestions (Firgure 13). A signal detection analysis confirmed that negative mood markedly improved eyewitnesses' ability to discriminate between correct and false memory details, suggesting that our memories are more trustworthy when think more carefully in a negative affective stats.

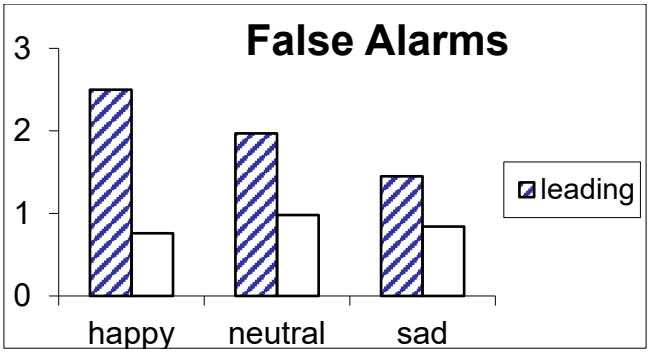

Figure 13. Mood effects on eyewitness gullibility: Experiencing negative mood when receiving misleading information reduces eyewitness distortions compared to neutral or positive mood participants (After Forgas, Laham & Vargas, 2005).

These experiments offer convergent evidence that negative moods can have significant adaptive effects on memory by reducing mistakes and vulnerability to misleading information, consistent with negative moods promoting a more focused, accommodative processing style.

Discussion

Deciding what to believe and whom to trust is one of the most difficult and cognitively demanding tasks we all face in everyday life. These results provide clear evidence that transient mood can influence the level of gullibility or scepticism in many social situations. These experiments show that negative mood reduces bullshit receptivity, decreases the truth bias when evaluating urban myths, improves the ability to detect deception, and reduces eyewitness gullibility. These findings broadly support our hypothesis that positive and negative moods have an important adaptive evolutionary function and trigger different information processing strategies (Bless & Fiedler, 2006; Forgas, 2024). Mood also had a significant influence on people's accuracy at complex inferential tasks such as detecting deception. We found that people in a negative mood were better able than positive and neutral mood people to accurately identify lies. These results have some promising theoretical and practical implications for understanding the influence of mood on everyday social judgments in general, and gullibility in particular.

Theoretical implications. The evidence reviewed here extends previous work on mood effects on social cognition in general, and impression formation in particular (Forgas & Bower, 1987; Forgas et al., 1984) to the new domain of trust judgments, gullibility vs. scepticism. Trust judgments represent a particularly demanding cognitive task that requires

highly constructive inferential processing with a high level of uncertainty (Forgas, 1995, 2002; 2024). It is just these kinds of open and indeterminate judgments that have been found to be particularly subject to mood-induced biases in the past (Fiedler, 2001; Forgas, 1994, 1995; Goel;, 2022; Sedikides, 1995). Recent affect-cognition research suggests that negative affect functions like a mild, evolutionary warning signal, and generally contributes to a more cautious, distrustful and attentive processing style, and also contributes to the selective accessibility of negative information in memory. Positive feelings and moods on the other hand signal familiarity and safety and tend to produce a more trusting, confident and optimistic interpretation of complex social information (Forgas, 1999, 2002).

These results are also theoretically and empirically consistent with a growing body of literature highlighting the apparently beneficial and functional processing effects of negative mood in a variety of social cognitive tasks (Bless, 2001; Bless & Fiedler, 2006; Fiedler, 2001; Forgas, 2024). In addition to priming negative information and increasing overall scepticism, negative affect also produced a specific advantage in detecting manipulative messages likely to abuse trust. These benefits confirm other evidence documenting the adaptive effects of negative affect in a variety of situations, including the reduction of some heuristic judgmental errors such as primacy and salience effects, and also improving the efficacy of strategic communications such as formulating persuasive messages (Forgas, 1998, 2007; 2011; 2013; Forgas et al., 2005).

Practical implications. Given the human propensity to trust and believe rather than disbelieve others, understanding the psychology of trust judgments is particularly importance in our culture where most messages come not from well-know and trusted others, but from strangers who seek to exploit our endemic gullibility. Many professionals in the persuasion business, such as influencers, salesmen, politicians and designers of web platforms are implicitly aware that putting recipients into a positive mood is likely to promote trust and credulity and the subsequent acceptance of their misleading or manipulative messages. The series of experiments reviewed here provide clear empirical support for this intuitive belief. However, the empirical evidence also holds out some hope that more critical thinking, a greater care and focus on concrete details and general scepticism can also be increased as a result of mild negative feeling states. The ability to correctly discriminate between truths and lies and so avoid misplacing our trust is of crucial importance in both of our personal and professional lives. The present demonstration of a

affective influences on trust judgments has some interesting practical implications for improving affective intelligence in everyday life, and could be incorporated in the training of professionals who routinely engaged in trust-related judgments.

These findings may also help to focus attention on the beneficial but counterintuitive effects of negative mood and the possible undesirable consequences of positive mood in some real-life circumstances. There has been much emphasis on the various benefits of positive mood in the recent literature in clinical, organizational, counselling and health psychology. Happy people are often thought to be more creative, flexible, motivated and effective on a number of tasks, and more likely to be trusting (Forgas & George, 2001). Our findings, together with a growing number of recent experimental studies, suggest that positive affect may not always be universally desirable. Several studies now show that people in a good mood are more likely to be gullible, commit judgmental mistakes (Forgas, 1998; 2011; 2013), are more prone to eyewitness errors (Forgas et al., 2005), and are less effective persuaders (Forgas, 2007). To this list we may now add another important caveat: people in a positive mood may also be generally more trusting and gullible and less able to detect deception than are people in negative mood.

It is important to note that affective influences on cognition are very subtle and often depend on the interplay of subtle contextual cues as suggested by the affect Infusion Model (Forgas, 1995; Forgas & Eich, 2013). For example, affective influences may be different or even absent when situational cues trigger a more motivated processing style, or when the reaction is well-rehearsed and involves little actual on-line processing. Mood effects on trust or distrust may also be highly sensitive to a variety of other pragmatic situational and personality variables such as the motivations, personality and affective intelligence of the individual. For example, Lane and DePaulo (1999) found that dispositionally dysphoric individuals were only better at detecting specific types of lies, namely false reassurances, perhaps because these are the type of deceptive communications they are most likely to be exposed to themselves.

Future research may well explore mood effects on trust judgments in more complex and realistic everyday situations (eg. Forgas & Moylan, 1987). In the experiments rpesented here considerable effort was made here to make the situations realistic, real-life instances of trust judgments may vary in a number of respects. To the extent that these empirical results were conceptually consistent across a number of dependent measures and

judgmental domains, and are also consistent with existing affect-cognition theories (Forgas, 2006, 2007; 2024), we can be reasonably confident that these findings are reliable.

In addition to exploring non-specific mood effects, future studies may also look at the consequences of specific emotions, such as fear, disgust and anger on gullibility and scepticism on trust judgments (e.g., Lerner & Keltner, 2001). We know for example that fear and disgust are typically associated with avoidant behaviors, whereas anger tends to elicit aggression, both of which should reduce the tendency to trust others. It may well be that the specific behavioral tendencies associated with specific emotions also have a distinct influence on the tendency to trust or distrust communications from others, a promising topic for future investigations.

In summary, judging the trustworthiness of people and social information in everyday situations can be a demanding cognitive task that requires highly constructive processing strategies (Forgas, 1995, 2002). Despite recent advances in affect research, we still do not know enough about how such subtle feelings impact on cognition in general, and the degree of trust, scepticism or gullibility people bring to a particular task. These experiments extend recent research on affect and social cognition (Bower, 1981; Fiedler, 2001; Forgas, 1995, 2002; 2024) to the new domain of trust-related judgments and decisions and the detection of manipulative communications in particular. We found that negative affect can increase, and positive mood decrease overall scepticism and improve their accuracy in detecting manipulation. These results suggest that further research on affective influences on trust judgments and the detection of deception should be of considerable theoretical as well as applied interest.

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