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Introduction: Research on mood valence and persuasion demonstrated that individuals in a negative mood use systematic processing strategies and are more persuaded by strong than weak arguments, whereas persons in a *positive* mood tend to use heuristic strategies and be equally persuaded by strong and weak arguments (Schwarz, Bless, & Bohner, 1991). We extended this research, exploring the impact of *specific affective states*, namely happy, sad, and angry moods on message processing and attitudes.

According to Schwarz (1990), both sad and angry states inform the individual that its current environment is problematic and trigger systematic processing, whereas happiness tells the person that the situation is safe and instigates simplifying processing strategies. However, anger may be tied to a narrower range of eliciting conditions than sadness. Thus, the causes of angry affect are more likely to be in the person's focus of attention, which may render systematic processing of unrelated information less likely. Moreover, another approach (Kuhl, 1983) predicts that both anger and happiness trigger a "holistic" processing mode and reduce detail-oriented processing in comparison with sadness.

To summarize, current theories suggest rival predictions concerning effects of anger on processing style. We explored these predictions within the persuasion domain.

Method: Sixty-four subjects participated in a 3 (mood: happy, sad, angry) × 2 (arguments: strong, weak) between-subjects experiment. Moods were induced by having subjects recall a happy, sad, or angry life event, respectively. Subsequently, subjects processed strong or weak counterattitudinal arguments. These were simultaneously displayed in a diagram. Later subjects reported their attitude towards the message topic, listed their cognitive responses, and stated the strategy they used in reading the arguments.

Results: Manipulation checks indicated that the induction of happy, sad, and angry *moods* was successful. Condition means of *attitude* (1 to 9 scale, higher scores indicating more agreement) were: happy mood/strong arguments, M = 5.40; happy/weak, M = 3.15; sad/strong, M = 5.90; sad/weak, M = 2.27; angry/strong, M = 6.90; and angry/weak, M = 1.70. A 3×2 ANOVA revealed a main effect of argument strength, $F(1,58) = 47.41$, $p < .001$, and an interac-

tion of argument strength and mood, $F(2,58) = 2.54$, $p < 09$. Replicating previous findings, happy subjects' attitudes were less influenced by argument strength than those of either sad or angry subjects. Moreover, angry subjects' attitudes seemed more strongly affected by argument strength than sad subjects' attitudes, although this comparison was not significant.

Condition means for *favorability of cognitive responses* (range from −1 to +1) were: happy/strong, $M = +.04$; happy/weak, $M = -.32$; sad/strong, $M = +.17$; sad/weak, $M = -.48$; angry/strong, $M = .00$; angry/weak, and $M = -.29$. Again, a significant effect of argument strength emerged, $F(1,58) = 15.85$, $p < .001$. Though none of the focused interactions were significant, the data suggest that in contrast to the attitude data, angry subjects' cognitive responses depended less on argument strength than did sad subjects' responses. Multivariate analyses indeed showed that the attitude judgments of angry subjects were not mediated by systematic thinking about the message's arguments.

Subjects' responses on how they proceeded while studying the diagram containing the message were categorized as reflecting either a systematic or a nonsystematic strategy. A systematic strategy was adopted by 45% of the angry subjects, by 69% of the happy subjects, and by 91% of the sad subjects, $F(2,58) = 5.30$, $p < .01$.

Discussion: Angry and sad moods clearly yielded different patterns of information processing: The attitude data seem to favor Schwarz's model; the processing data appear to support Kuhl's predictions. The full result pattern may be explained by assuming that situations that typically evoke anger versus sadness differently affect the encoding and judgment stages of the persuasion process. Specifically, angry individuals seem to use less systematic strategies at the stage of encoding a persuasive message, leading to less polarized cognitive responses. At the judgment stage, however, angry people evaluate a message's position quite extremely, which may also reflect an inclination to simplify.

Bless, Mackie, and Schwarz (1992) demonstrated that the tendency to simplify processing under *positive* mood yields a different attitude pattern depending upon whether mood is induced prior to encoding or after encoding but before judgment. Future studies should employ a similar paradigm to separate influences of anger at distinct stages of message processing.

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Introduction: Complex decision making tasks require activities which involve generating ideas, plans, strategies, and integrating proposals to an acceptable solution. In the majority of the cases, complex problems do not have objectively correct solutions. The effectiveness of coping with such problems depends on the degree to which group activity is brought into line with the problem structure. The group should produce and differentiate a large number of aspects in order to develop a comprehensive problem view. However, differentiation has to be reduced during group interaction if the group is to reach a conclusion. For that purpose, increased activity towards integration of concepts must occur.

In organizations, complex decision making usually is prepared by teams. The dynamic process of these task-oriented small groups is often evaluated by summarizing differential effects of team work. This paper deals with the effect of different task-instructions and different organizational roles of the participants on group processes.

Method: Thirty teams participated in a free simulation of a real public administration case. Each team was composed of 5 male senior officials between 40 and 50 years old, who performed the same or a similar job in their regular work environments. In the simulation, participants were given role instructions representing different hierarchical levels and different technical responsibilities.

Throughout the simulation, three different procedures of collective decision making were assessed in a systematic way. One of these procedures was given to each group by written and oral instruction.

The first instruction (7 groups), called divisional decision making, requires group participants, independently from each other, to develop a solution to the problem from the point of view of their own department. The final decision is made by the whole group under the direction of a discussion leader. The second instruction (7 groups) induces hierarchical decision making: The task of the discussion leader is to prepare a good solution to the problem and present it to the participants of the group meeting. The group members should op-