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ABSTRACT

Three related experiments investigated the impact of happy and sad moods on the processing of persuasive communications. These experiments suggest that subjects in a happy mood are less likely to elaborate the content of a persuasive message than subjects in a sad mood. Sad subjects' attitudes and cognitive responses (in experiment 2, with 87 subjects) as well as their behavior (in experiment 1, with 52 subjects), were influenced by strong but not by weak arguments, whereas happy subjects were equally persuaded by weak and strong arguments, suggesting that they did not elaborate the arguments. Working on a distractor task (75 subjects in experiment 3) eliminated the advantage of strong over weak arguments under bad mood conditions, providing further support for the elaboration hypothesis. (Six transparencies used in the presentation are included, and 21 references are attached.) (Author/SR)

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Mood and Persuasion:

A Cognitive Response Analysis

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## Abstract

Several experiments on the impact of happy and sad moods on the processing of persuasive communications are reported. These experiments suggest that subjects in a happy mood are less likely to elaborate the content of a persuasive message than subjects in a sad mood. For example, sad subjects' attitudes and cognitive responses (Experiment 2), as well as their behavior (Experiment 1), were influenced by strong but not by weak arguments, whereas happy subjects were equally persuaded by weak and strong arguments, suggesting that they did not elaborate the arguments. Working on a distractor task eliminated the advantage of strong over weak arguments under bad mood conditions, providing further support for the elaboration hypothesis (Experiment 3).

Implications for various models of affect and cognition are discussed.

**Effects of Affective States  
on the Processing of Persuasive Communications**

Attempts to persuade another person are often accompanied by efforts to change this person's current mood. From little kids who say nice things to Daddy before they ask for a favor, to professionals in the advertising business who create funny and entertaining TV spots, or use fear-arousing messages, to persuade consumers, we are all familiar with persuasion strategies that include attempts to change the recipient's mood. The frequent use of this persuasion strategy, and practitioners' faith in it, suggests that it may actually be effective. However, the exact mechanisms by which recipients' affective states mediate persuasion processes are not yet understood.

During recent years, we have conducted a series of experimental investigations to explore a number of different cognitive mechanisms that may moderate the impact of affective states on the processing of persuasive communications (Bless, Bohner, Schwarz, & Strack, 1986, 1988; Schwarz, 1985, 1987; Schwarz, Servay, & Kumpf, 1985). In the present paper, we will review some of these studies, focusing on the impact of happy and sad moods on the persuasiveness of counterattitudinal communications.

According to Petty and Cacioppo's (1986) elaboration likelihood model of persuasion, recipients of a persuasive communication may either elaborate the content of the message, reflecting a "central route to persuasion" in their terms, or they may rely upon simple non-content cues, reflecting a

"peripheral route to persuasion". If a central route of persuasion is taken, the resulting attitude change is a function of the recipients' cognitive responses to the message. Accordingly, messages that present strong arguments are more effective than messages that present weak arguments. The quality of the message does not affect attitude change, however, if a peripheral route is taken, which does not imply an elaboration of the implications of the message.

According to this general framework, moods may influence persuasion processes in several ways:

#### Transparency 1

First, the recipient's mood itself may serve as a peripheral cue. As we have shown in other domains of judgment, individuals frequently simplify the judgmental task by asking themselves, "How do I feel about it?". In doing so, they use their affective reaction to the object of judgment as a basis for its evaluation (see Schwarz & Clore, 1988 for a review). If individuals use their affective state as a peripheral cue they should report more favorable attitudes towards the issue of the persuasive message under good than under bad mood (see Schwarz & Clore, 1988; Schwarz, Servay & Kumpf, 1985 for detailed discussions).

Second, the criteria used to evaluate the message may be influenced by the recipients' affective state, and recipients in a bad mood may use harsher criteria.

Moreover, attitude judgments may be mediated by mood congruent memory (Bower, 1981), and recipients in a good mood

may generate more positive associations than recipients who are in a bad mood. If so, recipients in a good mood should be more likely to be persuaded than recipients in a bad mood.

All of these hypotheses predict a main effect of mood such that individuals in a good mood are more likely to be persuaded than individuals in a bad mood.

Alternatively, however, it is conceivable that subjects' affective state influences the degree to which they elaborate the content of the message presented to them. For example, Isen and colleagues (Isen, Means, Patrick, & Nowicki, 1982; Isen, 1984) suggested that individuals in a good mood may avoid cognitive effort that could interfere with their ability to maintain their pleasant affective state. If so, persons in a good mood may be unlikely to elaborate the message.

The effects of bad moods, however, are more difficult to predict. On the one hand, research on coping with bad moods (e.g., Rosenbaum, 1980) suggests that individuals in a bad mood may be motivated to distract themselves from unpleasant thoughts, and may thus be particularly likely to engage in other activities that are irrelevant to the factors that produced their bad mood. Thus, they may concentrate on the message and elaborate its content. On the other hand, depressed moods have also been found to go along with decreased motivation (e.g. Peterson & Seligman, 1984) and may thus decrease the likelihood of message elaboration.

If individuals' affective state influences the degree to which they elaborate the content of the message, main effects of mood are unlikely to be obtained. Rather, the impact of recipients' mood should depend on the quality of the arguments

presented to them. As a considerable body of research has shown, strong arguments are the more persuasive the more the recipient engages in message elaboration. Conversely, weak arguments are the less persuasive the more the recipient elaborates the content of the message, thus realizing the weakness of the arguments. Accordingly, a comparison of the impact of affective states on the persuasiveness of strong and weak arguments allows an evaluation of the proposed hypotheses.

Let us now review some data that bear on these issues.

### Experiment 1

To begin with a real world illustration, imagine that you want to use a public telephone. But before you can place your call, you are approached by a person who asks you to let him make his own call first. Would you be more likely to comply with this request if you were in a good rather than in a bad mood? Probably yes, as a considerable number of studies on mood and helping behavior suggests (see Isen, 1984 for a review). But more germane to the present issue: Would the quality of this fellow's excuse make more of a difference when you are in a good mood or when you are in a bad mood?

To explore this issue, we conducted a field-experiment with 52 users of a public telephone in Mannheim, West Germany. Half of our subjects happened to find a 1 DM coin in the telephone booth, equivalent of half a US-Dollar, while the others did not. Pretests demonstrated that finding a coin did significantly improve subjects' current mood. Before they could place their phone call, however, subjects were approached by a confederate who asked them for permission to advance in line

and to make her own call first.

For half of the subjects, the confederate provided a reasonable excuse, by informing the subject that she had to get a hold of her boss, who would only be in his office for another five minutes. For the other half, the confederate's request was not accompanied by a plausible reason.

Overall, subjects' mood did not influence their compliance. While 83% of the good mood subjects complied with the confederate's request, the same was true for 66% of the control group subjects. Thus, no main effect of mood was obtained. On the other hand, subjects were twice as likely to comply with the confederate's request when a plausible reason was given (84%) than when it was not (44.5%). This latter finding, however, largely depended on subjects' mood, as shown in the next transparency.

#### Transparency 2

Specifically, 39% of the control group subjects, who did not find a coin, complied with the request without receiving a plausible reason, whereas 92% complied when a reason was provided. Good mood subjects, on the other hand, who did find a coin, were not significantly affected by the quality of the excuse. They complied with the request independently of whether it was accompanied by a plausible reason (75%) or not (50%).

Thus, it seems that subjects who were in a good mood were less likely to pay attention to the quality of the request than subjects who were not in a good mood. We will now turn to more systematic evidence for this hypothesis.



### Experiment 2

A follow-up experiment, which is only partially reported in the present paper (see Bless et al , 1988 for a full report), was designed to provide more systematic insight into the impact of good and bad moods on recipients' processing of persuasive counterattitudinal communications that present strong or weak arguments. Subjects were 87 female students of the University of Heidelberg. To induce a good or bad mood, subjects were asked to provide a vivid report of a pleasant or an unpleasant life-event. As part of a purportedly independent second study, concerned with language comprehension, they were subsequently exposed to a tape recorded communication that presented either strong or weak arguments in favor of an increase in student services fees.

Finally, their attitudes toward an increase in student services fees, their cognitive responses to the message, their memory for the message's content, and their evaluation of the message were assessed.

### Results

Attitudes. As shown in the next transparency,

### Transparency 3

subjects in a bad mood reported more favorable attitudes toward an increase in student services fees when they were exposed to strong arguments than when they were exposed to weak arguments. Subjects in a good mood, on the other hand, were equally

persuaded by strong and by weak arguments, and reported a moderately positive attitude independent of the quality of the arguments. This suggests, that subjects in a good mood may have been less likely to elaborate the content of the message than subjects who were in a bad mood.

Cognitive Responses. This conclusion is supported by an analysis of subjects' cognitive responses. As shown in Transparency 4,

#### Transparency 4

subjects who were put in a bad mood generated a higher proportion of favorable and a lower proportion of unfavorable thoughts in response to the strong arguments than in response to the weak arguments, reflecting a high degree of systematic elaboration of the message. The cognitive responses generated by subjects in a good mood, on the other hand, did not vary as a function of message quality, suggesting that the occurrence of favorable and unfavorable thoughts under good mood was independent of the content of the message.

In combination with the attitude data, these findings support the hypothesis that the impact of mood on persuasion is mediated by its impact on subjects' processing strategies. While subjects in a bad mood elaborated the content of the message according to a central route of persuasion, subjects in a good mood did not do so.

Moreover, the obtained interaction effects of mood and argument strength are incompatible with competing process assumptions, including the mood-as-peripheral cue hypothesis

and the mood-congruent recall hypothesis. As noted before, all of these hypotheses predict main effect: of mood rather than interaction effects of mood and message quality.

### Experiment 3

A subsequent study provides additional support for the conclusion that subjects' mood states influence to which degree they elaborate a message. According to the elaboration likelihood model, the amount of message elaboration is determined by the recipient's motivation and ability to process the message, and variables like distraction, personal relevance, repetition, prior knowledge etc. can decrease or increase message elaboration.

Accordingly, one can test the hypothesis that the impact of mood on persuasion is mediated by its impact on subjects' cognitive responses by introducing a distraction manipulation. If subjects in a bad mood are likely to elaborate the message, while subjects in a good mood are less likely to do so, introducing a distraction manipulation should eliminate the mood effects obtained in Experiment 2.

To test this hypothesis, 75 female subjects were put in a good or bad mood, and were exposed to strong or weak arguments, replicating the procedures used in the previous experiment. In addition, half of the subjects were distracted while they listened to the message. Specifically, these subjects had to solve simple computation tasks that were presented on slides while they listened to the tape.

### Results

Attitudes. The data of the non-distracted subjects replicate the findings of Experiment 2, as shown in the next transparency.

#### Transparency 5

Again, subjects in a bad mood were persuaded by strong but not by weak arguments, whereas subjects in a good mood were moderately persuaded by both messages.

If subjects in a bad mood elaborate the message while subjects in a good mood do not, both groups should be differentially affected by the distractor task. As shown in the second half of the transparency, this is indeed the case. Introducing a distractor task during exposure to the message eliminated the advantage of strong over weak arguments under bad mood conditions. Subjects in a good mood, on the other hand, were not affected by the distractor task, presumably because they did not elaborate the message to begin with.

Cognitive Responses. This conclusion is again supported by an analysis of subjects' cognitive responses, as shown in the next transparency.

#### Transparency 6

Separate analyses under each distraction condition indicated that non-distracted subjects in a bad mood reported a higher proportion of favorable and a smaller proportion of unfavorable thoughts in response to the strong rather than the weak arguments. And this pattern was significantly less pronounced when bad mood subjects were distracted than when they were not.

The cognitive responses reported by subjects in a good mood, on the other hand, were not affected by the distraction manipulation, again paralleling the attitude change data.

### Conclusions

In combination, the findings of these experiments, as well as of related research by Worth and Mackie (1987), indicate that the impact of mood on persuasion is mediated by its impact on the elaboration of message content. Specifically, subjects in a good mood seem less likely to elaborate the presented arguments than subjects in a bad mood. None of the other processes, mentioned above can account for the reported findings (see Bless et al., 1988 for a detailed discussion). Whether these differences in elaboration are due to mood induced differences in subjects' motivation or to differences in their cognitive capacity to process a communication, requires further research (see Schwarz, 1988 for a detailed discussion).

In conclusion, putting recipients in a good mood when we want to influence them may not always be a good idea. Specifically, when we have strong arguments to present in favor of our case, recipients' good mood may reduce their impact by interfering with recipients' elaboration of the message. This interference is particularly undesirable because attitude change via a central route of persuasion has been found to be more stable than attitude change via a peripheral route (cf. Petty & Cacioppo, 1986). Thus, strong arguments are likely to be more persuasive when we deliver them to an audience that is in a neutral or slightly depressed mood.

Weak arguments, on the other hand, are more effective when

recipients do not elaborate them. Therefore, if we have nothing compelling to say, putting the audience in a good mood may be a smart choice -- much as many advertisers seem to have known for quite a while.

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## Mood and Persuasion: Some Possible Mechanisms

- \* *Mood serves as a peripheral cue*
- \* *Mood affects criteria used*
- \* *Mood influences associations*
  - > main effects of mood
- \* *Mood affects message elaboration*
  - > interaction effects of mood and message quality

# Compliance as a Function of Mood and Type of Request

## *Type of Request*

Reason given      No reason given

### *Mood*

No coin

**92%**

**39%**

Coin

**75%**

**50%**

# Attitude Change as a Function of Mood and Message Quality

<i>Mood</i>	<i>Message Quality</i>	
	Strong arguments	Weak arguments
good	<b>4.6</b>	<b>4.7</b>
bad	<b>5.4</b>	<b>3.0</b>
	Control	<b>3.3</b>

# Mean Proportion of Favorable and Unfavorable Thoughts

## *Message Quality*

Strong arguments    Weak arguments

### *Bad Mood*

Favorable	<b>.31</b>	<b>.06</b>
Unfavorable	<b>.35</b>	<b>.59</b>

### *Good Mood*

Favorable	<b>.14</b>	<b>.16</b>
Unfavorable	<b>.55</b>	<b>.50</b>

# Attitude Change as a Function of Mood, Message Quality and Distraction

	<i>Message Quality</i>	
	Strong arguments	Weak arguments
<i>No Distraction</i>		
Good mood	<b>4.3</b>	<b>4.2</b>
Bad mood	<b>4.2</b>	<b>2.6</b>
<i>Distraction</i>		
Good mood	<b>4.7</b>	<b>4.0</b>
Bad mood	<b>4.0</b>	<b>4.1</b>

Mean Proportion of Favorable Thoughts:  
Mood, Message Quality and Distraction

	<i>Message Quality</i>	
	Strong arguments	Weak arguments
<i>No Distraction</i>		
Good mood	<b>.15</b>	<b>.14</b>
Bad mood	<b>.35</b>	<b>.07</b>
<i>Distraction</i>		
Good mood	<b>.25</b>	<b>.29</b>
Bad mood	<b>.27</b>	<b>.23</b>