

Background

“Does the world look worse while we are in a bad mood?”

For decades, researchers have speculated about various ways in which mood influences our perceptions and judgments of others.

- **Mood-congruent effect:** assimilating effect of mood – the valence of the mood matches the valence of general attitudes toward targets.
- **Mood-incongruent effect** or attenuated mood-congruency: functional effect of mood – the valence of the mood mismatches the valence of general attitudes toward targets.
There are various theoretical accounts for the processes in which mood-congruency and mood-incongruency occur.
- **Mood-as-priming account** (Bower, 1981): affective states prime valence-congruent memories and thoughts by facilitating the speed of encoding, the likelihood of retrieval, and the selection of affectively congruent stimuli.
- **Mood-as-information account** (Schwarz & Clore, 1983): affective states are used as information to interpret the situation when those states are not explained away and the situation requires explanations.
- **Cognitive tuning account** (Schwarz, 1990): affective states signal the state of the environment and adjust information processing style. Negative mood signals a “problematic” situation, fostering an analytic, bottom-up processing style with attention to details. Positive mood signals “benign” situation, allowing less effortful, top-down processing style with exploration of novel/risky options for action.
- **‘Social tuning’ account** (Lambert, Khan, Lickel, & Fricke, 1997): Sad moods increase sensitivity to adverse social consequences, preventing socially undesirable judgments and actions.
- **Mood-repair account** (Isen, 1987): People self-regulate their mood. Negative mood states direct one’s attention to positive information and away from negative information in order to better one’s mood.
- **Affect Infusion Model** (Forgas, 1995): affect infusion (i.e., mood-congruency) is more likely when judgments are open-ended and require substantive processing of the information such as selection and integration of novel information about the target, in contrast to when judgments are heuristic (retrieving existing evaluations or stereotypes) or accompanied with a specific goal (e.g., accuracy concern).

Present meta-analysis examined moderators for mood-congruent effects and degrees to which their boundary conditions are compatible with these theoretical accounts.

Method

Literature Search

PsycInfo (1967-2011) with search terms: negative affect, negative mood, depressed mood, sadness, mood, or affect, and social judgment, stereotypes, judgments, or person perceptions. Backwards literature search and thorough review of reference lists of key review articles were also conducted.

Inclusion and Exclusion Criteria

- Must be a published experiment which manipulated sadness or negative mood as an ‘incidental’ affect unrelated to the judgment targets.
- Must include a judgment of a person other than self as a dependent measure.
- Must *not* have had manipulated anger or irritation.

Meta-analytic Sample

96 independent samples across 55 independent studies were included, consisting of a total of 5,133 participants with the average sample size of 48.97 of which 61% were female and a median publication year of 1994.5.

Effect Sizes

- Cohen’s $d = \frac{\bar{x}_1 \text{ (negative affect condition)} - \bar{x}_2 \text{ (control condition: neutral or happy)}}{s}$ (pooled estimate of standard deviation)
- The inverse variance weights were used to adjust parameter estimates

Coded and Judged Variables

Method sections were evaluated for 11 discrete variables (Table 2) by 2 independent coders and 4 continuous variables (Table 1) by 2 groups of 3 independent judges.

Table 1. Definitions, Scale Values, Reliability Estimates of Judged Variables

Judged Variable	Definition	Scale Range	α
Length of target description	How lengthy was target description? (e.g., use of a single category vs. a paragraph: per target)	1 = not long 7 = very long	.88
Sadness intensity	How intense was the induced sadness? (Were the participants crying/sad or just feeling down?)	1 = not intense 5 = very intense	.79
Self-relevance of mood	To what degree was the manipulation of sadness relevant to the participant? (e.g., autobiographical induction vs. music induction)	1 = not relevant 5 = clearly relevant	.96
Involvement in mood induction	What was the degree of self-involvement in the mood induction manipulation? (e.g., sentence completion vs. music induction)	1 = no involvement 5 = clearly involved	.97

Results

An overall mood-congruent effect was observed (fixed: $d = .18, Z = 6.51, p < .0001, CI = .13 - .23$; random: $d = .19, Z = 3.26, p = .0011, CI = .08 - .30$).

Table 2. Coded Variables and Mood Congruent Effects

Coded Variable	k	Fixed			Random		
		d	95% CI	Q_h	d	95% CI	Q_h
Distraction from sadness				11.13**			3.61
Low (attention to mood)	9	.16	-.04/.35		.05	-.33/.41	
Moderate	27	.01	-.10/.12		.02	-.20/.25	
High (distracted from mood)	55	.23***	.17/.30		.27***	.11/.41	
Nature of target rating				0.53			0.85
Evaluation	39	.20***	.13/.26		.23**	.09/.37	
Impression formation	57	.16***	.07/.24		.13	-.06/.30	
Dependent measure valence				11.17**			7.86*
Positive	49	.24***	.17/.31		.08	-.09/.25	
Bipolar	34	.32***	.22/.40		.40***	.21/.56	
Negative	17	.04	-.10/.17		.01	-.27/.29	
Media of target presentation				21.10***			8.60*
Text	70	.14***	.08/.20		.13^	-.00/.26	
Speech	9	.05	-.14/.23		-.01	-.36/.35	
Visual	13	.50***	.35/.62		.52***	.25/.72	
Interaction	4	.29**	.07/.48		.47^	-.03/.78	
Target identity				18.77***			2.7
Person	64	.13***	.06/.20		.12	-.02/.26	
Social category	32	.37***	.29/.44		.32**	.13/.49	
Target typicality				37.55***			9.17*
Atypical	13	.60***	.48/.70		.57***	.32/.75	
Typical	21	.10	-.04/.23		.12	-.13/.35	
Neither	62	.13***	.06/.19		.12^	-.02/.25	
Target valence				22.49***			7.11*
Positive	16	-.13	-.29/.05		-.14	-.42/.15	
Neutral	56	.30***	.23/.36		.30***	.15/.43	
Negative	24	.16**	.05/.27		.16	-.08/.37	
Self-relevance/involvement				39.52***			7.93*
Low	33	.39***	.32/.46		.27**	.08/.45	
Moderate	31	.26***	.15/.36		.31**	.11/.49	
High	31	-.02	-.12/.09		-.07	-.28/.14	
Type of mood induction				46.60***			16.75**
Autobiographical	25	.00	-.11/.12		-.03	-.25/.19	
Velten	10	.14	-.27/.31		.21	-.13/.50	
Audio/ Visual	36	.22***	.14/.30		.23*	.05/.39	
Negative feedback	13	.62***	.49/.73		.63***	.39/.79	
Priming	8	-.05	-.26/.16		-.07	-.43/.31	
Others	4	.14	-.09/.36		.11	-.38/.55	

✓ Mood congruency was attenuated when judgments were made right after a mood check.
Fixed $\beta_{\text{interaction}} = -.32 (p < .001)$
Random $\beta_{\text{interaction}} = -.33 (p < .05)$.

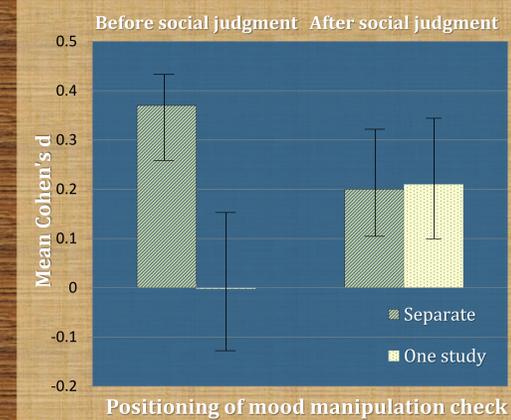
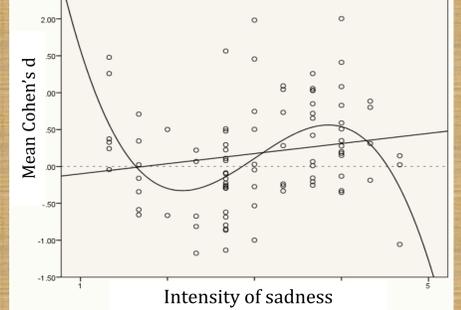


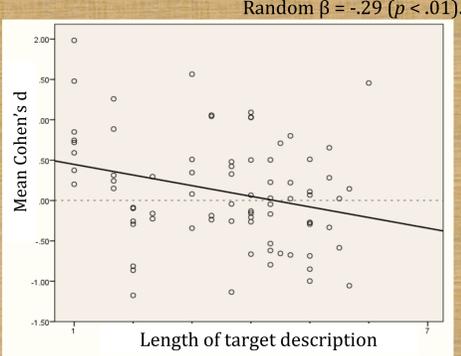
Figure 1. Interaction of the positioning of mood measure by the study setting on mood-congruency. Error bars are 95% CIs. (above)

✓ Intensity of sadness had a curvilinear relationship with mood-congruency.
Fixed $\beta_{\text{cubic}} = -.87 (p < .001)$
Random $\beta_{\text{cubic}} = -1.02 (p < .001)$



✓ The more target information there was, the less mood-congruence occurred.
Fixed $\beta = -.25 (p < .001)$
Random $\beta = -.29 (p < .01)$

Figure 2. Mood-congruency predicted by intensity of sadness (right top)
Figure 3. Mood-congruency predicted by length of target description (right)



Mean effect sizes comparisons and weighted regression analyses were conducted using the SPSS macro program provided by Lipsey and Wilson (2000). All the analyses were repeated, once assuming a fixed error model and once assuming a random error model.

Discussion

Mood congruent effects were attenuated when...

- ❖ Awareness of induced sadness was presumably high wherein the mood manipulation check was right before the social judgment, one pays an attention to the induced sadness, sadness was self-relevant and involved, and intensity of sadness was very high.
→ Compatible with Mood-as-information account
- ❖ Information about judgment target(s) was presumably abundant wherein the target description was lengthy.
→ Compatible with Mood-as-information account
X Incompatible with Affect Infusion Model
- ❖ Social desirability was likely a concern wherein the valence of judgment adjectives was negative and the target was an individual rather than a social category.
→ Compatible with Social Tuning account
- ❖ Sadness was self-relevant and judgment target(s) were positive (e.g., friendly).
→ Compatible with Mood Repair account

References

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