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Saying is experiencing: Affective consequences of complaining and affirmation

In four experiments mood was measured before and after complaining or affirmation. Participants complained or affirmed either themselves or listened to such communications of another person. Mood decreased after complaining and increased after affirmation – a "saying is experiencing" (SIE) effect. This effect was found also in the cognitive load condition suggesting that automatic mood contagion underlies the SIE effect rather than mechanisms based on self-perception or self-awareness. Appropriateness of a topic for complaining appeared a boundary condition of the SIE effect: When a topic was considered by participants the most appropriate for complaining, the act of showing dissatisfaction with the topic led to mood improvement.

Keywords: *Affirmation, Complaining, Mood, Saying is experiencing effect*

Saying is Experiencing: Affective Consequences of Complaining and Affirmation

Complaining is more frequently heard than studied. Using a diary method with a sample of American students, Alicke et al. (1992) found the average number of complaints to exceed four per day per participant of their study. In other cultures complaining may be even more frequent. A recent national survey conducted in Poland revealed that 40.5% of that population believes Poles complain very often and only less than one percent believes they do it never or rarely (Wojciszke, Szymków-Sudziarska & Baryła, 2008). At least in some contexts complaining may be also important – Kelley (1979) found that it ranked third in a list of 15 problems faced by romantic couples. Still, outside specific areas of consumer complaints (e.g. East, 2000) and hypochondria (e.g. Smith, Snyder & Perkins, 1983) only a few empirical studies on complaining have been published (Alicke et al., 1992; Kaiser & Miller, 2001; Kowalski & Cantrell, 2002). Despite a comprehensive theoretical model of antecedents, functions and consequences of complaining developed by Kowalski (1996), empirical research on this topic remains scarce. The present work attempts to fill this gap in knowledge by presenting a line of four studies on affective consequences of complaining and affirmation.

Complaining is defined as expressing dissatisfaction independently of whether it is actually experienced or not (Kowalski, 1996). Complaining is, then, an affect-expressive behavior, so it is logical to assume that it can result in direct changes of affective states. However, it is not clear whether complaining leads to positive or negative changes in affective states. Theoretical arguments may be developed for both improvement and deterioration of affective states after complaining.

Alicke et al. (1992) and Kowalski (1996, 2003) believe in cathartic function of complaining, that the expression of dissatisfaction leads to venting negative emotions, provides an emotional release from frustration and "gets it off one's chest". This assertion is based on what participants believe to be the reason of their own complaining – the desire to vent frustration was the most frequently cited reason of complaining by Alicke et al.'s participants of the diary study (and by Wojciszke et al.'s respondents of a national sample). Nevertheless, a subjective reason of a behavioral act is evidently different from an objective effect of the act, and the former cannot be considered a proof of the latter.

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Studies where affective states would be measured before and after complaining are needed to demonstrate the point, but to our knowledge such studies have not been published. Experiments on effects of writing or talking about traumatic emotional experiences seem to be the closest approximation of such studies. A number of experiments showed that the mere act of disclosure has astonishingly large therapeutic effects – it improves not only affective states, but also betters an array of physiological and behavioral outcomes like the number of physician visits, efficiency of the immunological system or reemployment following job loss (Davison, Pennebaker & Dickerson, 2000; Pennebaker, 1997, Smyth, 1998). Interestingly, these delayed and beneficial effects of emotional expression are preceded by strong increases in distress immediately after the expression. In all those experiments the topic of disclosure involved deep emotional experiences (usually traumatic) and emotional expression seemed necessary though not sufficient for the beneficial effects to materialize. What seems necessary is a transduction of the traumatic experience into linguistic structures that promote assimilation and understanding of the event. This requires a deep, thoughtful processing of the relevant memories using what Pennebaker, Mayne and Francis (1997) called causal words (because, reason) and insight words (understand, realize). In this respect, most cases of complaining are dissimilar to "emotional writing" as the former involve mundane topics of low emotional intensity and the typical act of complaining seems to be rather superficial than profound (Alicke et al., 1992; Wojciszke et al., 2008).

Provided this superficial nature of complaining and the immediate affective aftermath of expressing negative emotions, we believe that complaining leads to immediate deterioration of mood, while an act of affirmation leads to mood improvement. So, we postulate a "saying is experiencing" effect similar to changes in private opinions on a topic following own public utterances on the topic – the saying is believing effect (Higgins & Rholes, 1978). There are at least three mechanisms which may lead to the saying is experiencing effect.

The first is offered by the self-perception theory (Bem, 1972) which assumes that people infer their attitudes and preferences from their own overt behavior if the latter is perceived as unconstrained by situational pressures. If people feel free to complain or affirm, they may infer from their verbal behavior that they are in a bad or good mood and experience the mood accordingly. Inferring affective states from own behavior requires awareness of the behavior in question, of its possible situational constraints (or lack of them), and most probably also awareness of the relation between the two (Olson, 1992). In effect, if induced by self-perception, any change in mood would be conscious and, therefore, at least potentially amenable to conscious control. Because people are frequently motivated hedonistically (striving to remain in good mood or to achieve it if they are initially in bad mood, Larsen, 2000), this suggests that the saying is experiencing effects would be in most situations restricted to affirmation or at least that a mood improvement after affirmation should be stronger than a mood deterioration after complaining.

The second mechanism is offered by the objective self-awareness theory (Wicklund, 1975) and its finding that the self-focused state increases the intensity of affects and emotions experienced during this state (Carver & Scheier, 1981). As far as talking about one's own negative or positive opinions and emotional responses can be assumed to be self-focusing, self-awareness may be responsible for mood decreases after complaining and its increases after affirmation. This mechanism also presumes people's awareness of what they are talking about (whether the tone is positive or negative), although it does not presume the awareness of the fact that the tone of own utterances influences one's own mood. However, the basic premises are that (1) people actually feel bad when complaining or good when affirming and that (2) they focus on their own selves or at least on own affects experienced during complaining or affirmation. Neither of these premises is necessarily true in a society, where complaining is extremely frequent (Poland) and in many situations expressing dissatisfaction seems to be a socially shared habit, requiring no preexisting emotions nor conscious thoughts (Wojciszke et al., 2008). The extreme frequency and – presumably – the mindlessness of complaining acts makes the self-focus an implausible explanation of the saying is experiencing effect.

The third mechanism is mood self-contagion based on automatic links between the perception, action, and feelings (Chen & Bargh, 1999; Strack & Deutsch, 2004). Numerous dual-process theories of social cognition assume that information can be processed in two systems – one which requires mental capacity and motivation and bases on symbolically represented rules structured by language and logic, and another which functions automatically and draws on associations that are structured by similarity and contiguity (Smith & DeCoster, 2000). In their reflective and impulsive model Strack and Deutsch (2004) extended this theorizing on behavior as well, postulating that the reflective and impulsive systems regulate information processing and social behavior in parallel, although there is an asymmetry in the sense that the impulsive system is always engaged, whereas the reflective system may be disengaged when cognitive capacity is lacking. The impulsive system can be oriented toward either approach or avoidance and numerous data shows that this motivational orientation is elicited by the processing of positive or negative information, experiencing of positive or negative affect, or executing of approach or avoidance behaviors. The impulsive system functions according to a

compatibility principle – the processing of information, the experience of affect and the behavior execution facilitate each other when they are compatible in valence. Accordingly, negative emotional expressions should lead to negative affective states via activating automatic associations, while positive expressions should lead to positive affect even when people do not recognize consciously the sense of their expressions nor the expression-affective state links. This theorizing is supported by numerous results showing that congruent affective states follow expressive behavior even when this behavior is not recognized as such. For example, Stepper and Strack (1993) showed that people experience more intense emotions after a success or failure when adopting an upright or slumped posture under the pretext of studying different working conditions. Similar effects were reported for "subjectively non-emotional" facial expressions (Strack, Martin & Stepper, 1988) and nodding or shaking head movements (Förster & Strack, 1996).

The automatic mood contagion mechanism does not discern between mood decreases after complaining and mood increases after affirmation – both effects can be expected to arise and equal in strength. This mechanism allows also a prediction that it does not matter whether it is own or other person's complaining or affirmation (because affective codes are associated with perceptions and it is irrelevant whether these are self-perceptions or perceptions of others, cf. Dijksterhuis & Bargh, 2001). On the other hand, self-perception and self-awareness accounts predict the saying is experiencing effect to be constrained to own complaining or affirmation. Finally, the mood contagion explanation predicts the saying is experiencing effect to emerge also in conditions of cognitive load where participants are cognitively busy with a parallel task, while the two remaining explanations predict the effect to disappear in such conditions.

Present Studies

Our first aim was to provide empirical support for the saying is experiencing effect, that is, to show that complaining decreases and affirmation increases the mood. To this effect we conducted two studies were mood was measured before and after affirmation or complaining. In Experiment 1 participants listened to audio-taped affirmation or complaining of another person. In Experiment 2 they affirmed or complained themselves by voicing their own opinions on topics which had prompted positive or negative statements in the majority of pilot participants.

Experiment 3 was a conceptual replication of Experiment 2 with inclusion of cognitive load conditions where participants were asked to remember some content while speaking. The purpose of this study was to check whether the saying is experiencing effect emerges in conditions of scarce cognitive resources, thereby allowing us to discern between the mood contagion versus self-perception and self-awareness explanations of the basic effect.

Finally, in Experiment 4 we asked participants to show their satisfaction or dissatisfaction with topics they considered either right or wrong to complain about, according to what people in their immediate social milieu thought and did. As elaborated later, some topics may be seen as normative for complaining and it is possible, that complaining on such topics actually improves the affective state because it is a case of knowledge sharing and norm-maintenance behavior. In other words, Experiment 4 looked for a boundary condition of the hypothesized saying is experiencing effect.

Experiment 1

First two experiments were based on a similar design where mood was measured repeatedly before and after communication that was negative (complaining) or positive (affirmation) in tone. In Experiment 1 participants listened to communication of another person; in Experiment 2 participants produced their own communication.

Method

Participants and design. Sixty employees of a law firm (lawyers and paralegal workers, 33 men and 27 women, mean age = 27.88 years, *SD* = 3.76) participated in small groups from three to five persons. The design was 2 (tone of communication: complaining vs. affirmation) x 2 (time of mood measurement: before vs. after communication) with repeated measurements on the second factor.

Procedure and manipulation. Participants listened to a seven-minute audiotaped story about a vacation in Canary Islands (a popular vacation place in Europe) with the instruction to make an impression about the story teller. The story teller was a young woman (a paraprofessional actress) who presented a vivid and emotional account of either a very successful vacation (very good weather, excellent service, good company etc.) or a vacation which appeared unpleasant (harsh hot weather, poor service, and even poorer company etc.). Before and after listening to the story, participants filled a short scale measuring their mood. After listening to the communication, participants also showed their impressions of the story teller.

Measures. The "before" mood scale consisted of two positive and two negative general statements describing the participant's present mood in general terms (e.g. I feel pretty good at the moment. I am in a bad mood now.). Answers were given on scales ranging form 1 (doesn't describe my mood at all) to 7 (describes my mood very

well). Average agreement with the four statements (with negatives inverted) was used as the mood index. The "after" mood scale consisted of four similar statements that in previous research had been shown to be equivalent to the first four set of statements in terms of means and standard deviations. Both sets came from a general mood scale developed in Polish by Wojciszke and Baryla (2005). After recoding negative statements, the mood measure appeared internally consistent both in the before (Cronbach's α = .71) and after (α = .91) condition.

After listening to the communication participants showed their impressions of the story teller on three –5 to 0 to 5 rating scales answering the question whether the women was happy or unhappy (manipulation check) and whether she was generally likeable and emotionally stable or not.

Results

To check validity of the manipulation, the perceived happiness of the target woman was subjected to one-way ANOVA which yielded a strong effect of the communication emotional tone, F (1, 58) = 575.71, p < .001, η^2 = .91. Whereas the woman describing a successful holiday (the affirmation condition) was perceived as very happy (M = 4.43), the woman telling about the unpleasant vacation (the complaining condition) was perceived as unhappy (M = -3.63). This effect remained equally large after including "before" and "after" mood indices as covariates, which shows that the perception of complaining vs. affirmation is independent of the current mood of perceivers. The affirming person was also perceived as much more likeable (M = 3.77) and emotionally stable (M = 2.23) than the complaining one (M = -1.60 and M = -.07, respectively).

The main analysis was performed on the mood measure in a 2 (tone of communication: complaining vs. affirmation) x 2 (time of mood measurement: before vs. after communication) factorial design with repeated measurements on the second factor. This analysis revealed the expected interaction between both factors, F (1, 58) = 11.94, p = .001, η^2 = .17. No main effect appeared significant. As can be seen in Figure 1, affirmation led to significant increases in mood, and the before-after difference was significant, t (29) = 2.62, p = .007 (one-tailed test for dependent data). On the other hand, complaining led to significant decreases in mood with the before-after difference being significant, t (29) = 2.26, p = .016 (one-tailed). In effect, the final mood was higher in the affirmation than complaining condition, though there was not such a difference in the initial mood. However, because the initial mood was slightly higher in the complaining condition, this difference could have contributed to the whole interaction. Therefore, we performed also an analysis of covariance on the final mood measure as a function of the complaining vs. affirmation condition with the initial mood serving as a covariate, and this analysis showed a highly significant effect of the condition, F (1, 57) = 10.65, p = .002, η^2 = .16.

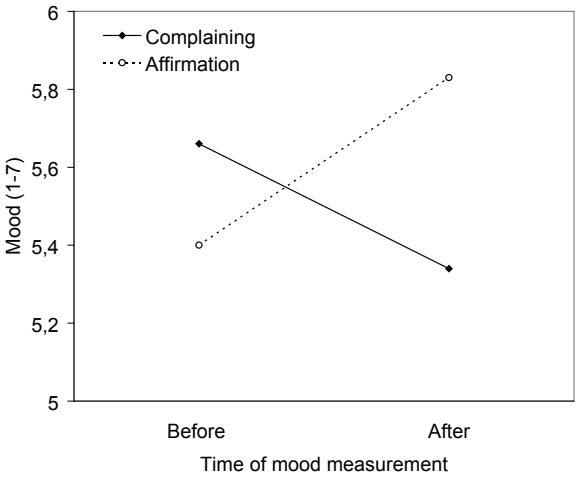

Figure 1. Mood before and after listening to other person's complaining or affirmation (Experiment 1).

Discussion

Clearly, listening to other person's affirmation increased mood in the listeners while listening to complaining led to mood deterioration. This is in line with previous findings that the vocal expression of emotions is able to induce corresponding feelings in listeners (Siegman & Boyle, 1993) and that other persons' communication tone induces corresponding mood in listeners (Neumann & Strack, 2000). Although such "emotion contagion" effects are frequently explained in terms of perspective taking which is an attention-consuming activity (Wispé, 1986), Neumann and Strack (2000) showed these effects also in a cognitive load condition suggesting the emotion sharing may be based on automatic rather than controlled information processing.
These results show also that complainers are perceived as less emotionally stable and less likeable than persons who affirm the same topics. This is in line with observations that complaining is an aversive behavior and complainers are perceived in a negative way (Kaiser & Miller, 2001; Kowalski, 2003; Kowalski & Cantrell, 1997).

Experiment 2

In this experiment mood was measured in a different way but also before and after a communication. This time, however, the negative or positive communication was produced by participants themselves.

Method

Participants and design. Fifty nine university students (8 men and 51 women, of mean age from 20 to 24) volunteered to participate individually. The design was 2 (tone of communication: complaining vs. affirmation) x 2 (time of mood measurement: before vs. after communication) with repeated measurements on the second factor.

Procedure and manipulation. Participants were asked to tell their opinions about four topics. For half participants the topics were negative (prices, public transportation, salaries, and the public health service), that is, they instigated negative opinions in a majority of students as found in several pilot studies. Another half of participants were randomly assigned to positive topics (holidays, pets, Christmas, receiving gifts). A young male experimenter purportedly wrote down their opinions. Before and after telling their opinions, participants filled a short scale measuring explicit mood. In the final measurement a measure of implicit mood was taken as well.

Measures. The "before" mood adjective check list consisted of four positive (elated, peaceful, pleasant, easy-going) and four negative (tense, upset, worried, disenchanted) mood descriptors and participants checked the adjectives describing their current mood. The "after" mood measure consisted of similar eight mood descriptors (glad, optimistic, fine, relaxed, unpleasant, dejected, discontented, unsettled) which in previous research had been shown to be equivalent to the first set in terms of proportion of people checking them as describing their current mood in neutral (non-manipulated) situations (Wojciszke & Baryla, 2005). The mood was scored as a number of positive minus negative descriptors checked. Additionally, participants rated their current mood on a graphic, continuous, 12-cm long scale anchored with statements "I feel bad" and "I feel good" (the answer was scored in millimeters from the left end of the scale). Since the adjective measure correlated with the mood ratings both before (r = .72) and after (r = .56) communications, the two were standardized (to make them comparable) and averaged into a global mood index which served as the main dependent measure.

A measure of implicit mood was devised after Rusting and Larsen (1998) and consisted of five incomplete words, each lacking one letter (e.g. JO_). Participant were asked to fill the gap with a letter which would make a sensible word. In each case two fillings were possible – one which made a positive word (e.g. JOY) and one which made a neutral word (e.g. JOB). The number of positive fillings (varying for 0 to 5) served as the measure of implicit mood.

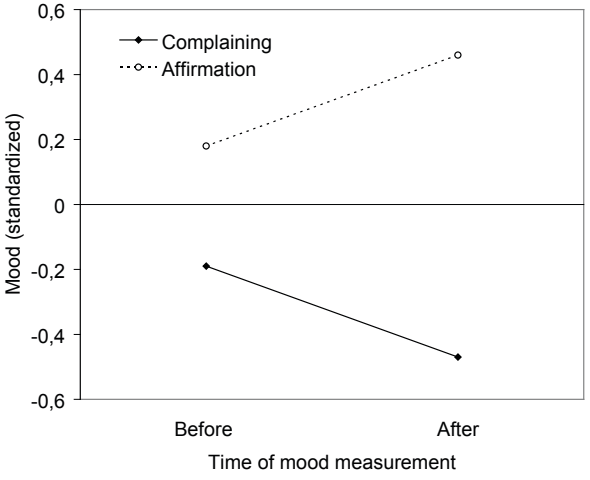

Figure 2. Mood before and after own complaining or affirmation (Experiment 2).

Results

The main analysis was performed on the mood index in a 2 (tone of communication: complaining vs. affirmation) x 2 (time of mood measurement: before vs. after communication) factorial design with repeated measurements on the second factor. This analysis revealed the expected interaction between the two factors, F (1, 57) = 7.32, p = .009, η^2 = .11. As can be seen in Figure 2, own affirmation led to significant increases in mood, and the before-after difference was significant, t (29) = 2.35, p = .013 (one-tailed test for dependent data). On the other hand, complaining led to a marginally significant decrease in mood, t (28) = 1.66, p = .054 (one-tailed).

The analysis revealed also an unexpected main effect of the communication tone, F (1, 57) = 11.50, p = .001, η^2 = .17, although it was constrained by the described interaction and the affirmation vs. complaining difference was not significant in the initial measurement, t (29) = 1.55, p = .126 (two-tailed). Nevertheless, because participants assigned to the affirmation condition tended to be in a higher initial mood than participants assigned to complaining, we performed also an analysis of covariance on the final mood measure with the communication tone as a factor and the initial mood serving as a covariate. This analysis revealed a clear main effect of the communication tone, F (1, 57) = 20.42, p = .0001, η^2 = .27, despite the significant contribution of the initial mood, F (1, 57) = 26.54, p = .0001, η^2 = .32.

Finally, the implicit mood measure (taken only after the communication) was compared between the conditions, revealing a significant difference, t (57) = 2.7, p = .022, d = .54 with the ambiguous words being completed in positive way more frequently in the affirmation (M = 1.72) than the complaining (M = 1.21) condition. This moderately strong effect remained virtually unchanged after inclusion of the final (or initial) explicit mood measure as a covariate. This

suggests independence of the communication influences on explicit and implicit measures of mood. Indeed, the two measures appeared unrelated, r (58) = .01, which is not an uncommon finding (Fazio & Olson, 2003). Also a mediation analysis with the condition serving as an independent variable, implicit mood as dependent, and explicit mood as a mediator failed to show a significant mediation.

Discussion

Results of this study provide a clear support for the saying is experiencing effect. Whereas own affirmation leads to mood improvement, own complaining leads to mood deterioration. Because these differences appear both for explicit and implicit mood measures, it is an argument for the mood contagion rather than the self-perception or self-awareness explanation of the saying is experiencing effect. It seems that affirmation increases accessibility of positive thoughts, or complaining decreases this accessibility, or both, although the present design is unable to discern between these possibilities. Nevertheless, the implicit mood measure points to mood contagion as the more plausible explanation of the saying is experiencing effect.

The same conclusion is suggested by the similarity of the present results to the effects of listening to other person's complaining or affirmation found in Experiment 1. Only automatic mood contagion can parsimoniously explain the similarity of affective consequences of the own and others' complaining versus affirmation. It should be also noticed that in both experiments the saying is experiencing effect was equally strong for complaining and affirmation. This also suggests that controlled processing strategies were not involved in the mood changes because controlled mood processing tend to be hedonistic (i.e. mood improving – Larsen, 2000) and hedonistic self-regulation would have led to stronger mood improvement after affirmation than mood deterioration after complaining.

Experiment 3

In this experiment we introduced a cognitive load manipulation to test whether the saying is experiencing effect will emerge in conditions where cognitive resources are scarce. This would be a strong argument for the impulsive nature of the effect stalked here since both self-perception and self-awareness mechanisms require mental capacity which is impaired in the double-task condition we used.

To explore this way of thinking, we designed a study where (under a pretext of recording spoken speech to be later analyzed for prosodic qualities) participants were asked to voice their opinion on nine topics showed by an experimenter. For half participants the topics were themes which invited predominantly negative opinions, for another half – themes which invited positive or neutral ones (as various pilot studies suggested). Cognitive load manipulation was crossed with the emotional tone of the topics and introduced by asking half participants to remember the topics they spoke about. This manipulation was shaped after a Gilbert, Pelham and Krull (1988) who found that participants who had been to remember themes on which a target person spoke (and became this way "cognitively busy") were less able to correct their impressions of the target for situational constraints and in effect fell prey to the correspondence bias. That is, they attributed high anxiety to a target who spoke on embarrassing topics, ignoring the fact that at least part of the target's anxiety shown in nonverbal behavior (the basis of participants' perceptions) was due to the nature of the topics. The interesting part of this manipulation was that the to be remembered material consisted of the topics of the target's utterances (flashed on the screen on which the target's nonverbal behavior was reproduced) – exactly the information on the situational constraints which should have been taken into account when inferring the target's anxiety. Still, what really counted was not the remembered content (which should reduce inferences of anxiety) but the fact there was something to remember (i.e. a parallel task which disrupted the correction for situational influences on behavior). We used this subtle manipulation of taxing our participants' cognitive resources to see whether the "saying is experiencing effect" will be found in such conditions.

Method

Participants and design. Eighty persons (40 men and 40 women, mean age = 44.61 years, SD = 13.03) agreed to participate individually. The participants were passersby in a public park (in summer) approached by a young female experimenter. The design was 2 (tone of communication: complaining vs. affirmation) x 2 (cognitive load: load vs. no load) x 2 (time of mood measurement: before vs. after communication) with repeated measurements on the last factor.

Procedure and manipulations. Participants were asked to convey their opinions on nine topics. For half participants all topics were negative (salaries, prices, crime, politicians, health service, functioning of state administration, the image of Poland in the world, environment pollution, efficiency of the police – according to pilot studies they instigated negative opinions in a majority of Poles). Another half participants were randomly assigned to positive topics (holidays, gifts received, the best liked celebrities etc.) The experimenter purportedly recorded their opinions ("to analyze prosodic features of speech" which was introduced

as a topic of the study) while showing slips of paper with the topics that the participants were to talk about. Half participants were randomly assigned to the cognitive load condition – they were asked to remember the topic they talked about. The remainder did not receive this part of instruction. At the end all participants were asked to recall the topics they talked about, debriefed, and thanked for their participation.

Measures. Before and after their communications participants received short adjective lists to show their present mood. The lists were identical to those used in Experiment 2. The differences between the number of positive and negative adjectives checked served as indices of the initial and final mood.

Results and Discussion

The main analysis was performed on the final mood index in a 2 (tone of communication: complaining vs. affirmation) x 2 (load vs. no load) with the initial mood serving as a covariate. This analysis revealed a significant influence of the initial on the final mood measure, F (1, 75) = 23.93, $p < .001$, $\eta^2 = .24$, and a significant main effect of the communication tone. The latter effect, however, was entirely constrained by the interaction between the tone and cognitive load, F (1, 75) = 4.71, $p = .033$, $\eta^2 = .06$. As illustrated in Figure 3, the final mood (controlled for the initial mood) was significantly higher in the affirmation than complaining condition, but this was true solely in the cognitive load condition, F (1, 37) = 6.32, $p = .016$. In the no load condition the difference between complaining and affirmation was not found, $F < 1$.

These results suggest that the communication tone influences own mood of the speaker also when the latter is cognitively busy with other, parallel tasks. Clearly, unconstrained cognitive resources are not necessary for one's mood to follow the tone of one's own utterances. This speaks for the explanation of the "saying is experiencing" effect in terms of mood self-contagion which can be automatic, rather than in terms of self-perception or self-focus which probably need conscious inferences and, therefore, cognitive resources.

However, provided that the parallel task in this experiment involved memorizing the topics of own statements, an alternative explanation of our results is plausible: May be the differences in the final mood are not an effect of cognitive load, but rather, they are due to increased accessibility of the topics inducing negative or positive thoughts. If under the memory instruction people keep in mind a greater amount of negative topics (complaining condition) or positive ones (affirmation condition), this may make their final mood decreased or increased, accordingly (compared to the no load condition). This alternative

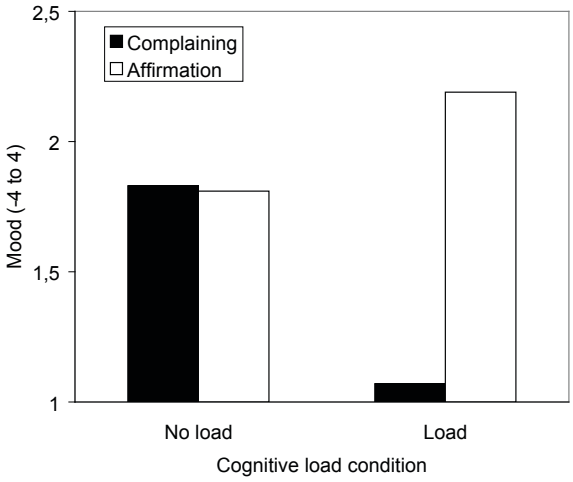

Figure 3. Mood after own complaining or affirmation in cognitive load versus no load condition (Experiment 3).

Table 1
Within-Cell Correlations (Pearson's r) Between the Mood Measures and Topic Recall in Experiment 3.

	Recall and final mood	Initial and final mood
Complaining		
No load	.07	.60**
Cognitive load	.02	.14
Affirmation		
No load	-.10	.86***
Cognitive load	.08	.12
Total		
No load	.00	.72***
Cognitive load	-.03	.04

explanation assumes that: (1) the participants remembered more topics under the memory instruction, i.e. in the load vs. no load condition and that (2) the number of topics remembered correlated with the final mood – negatively in the complaining condition and positively in the affirmation condition, especially among the participants who were burdened with the parallel task. Actually, none of these assumptions received support in the data.

A 2 (load vs. no load) x 2 (complaining vs. affirmation) analysis of variance on the number of topics remembered revealed no main effect of the load (i.e. memorizing instruction), F (1, 76) = 1.54, $p = .22$, nor any other significant effect. Participants remembered on the average 5.39 and 4.90 topics in the no load and load condition, respectively. Also the analysis of within cell correlations between the number of topics remembered and the final mood measure yielded null results. As can be seen in Table 1, the correlation did not even approach significance in any of the four cells.

This does not mean that no interesting effects of the load manipulation were found. As also illustrated in Table 1, strong correlations were found between the initial

and final mood measurements in the no load conditions, showing a strong continuity of mood, the interjecting utterance of opinions notwithstanding. These correlations, however, were absent in the cognitive load conditions – attempts to memorize topics while voicing own opinions on them erased totally the influence of the initial on the final mood resulting in discountinuity of the affective state. Mood represents one's current life situation – whether it is welcoming and poses no threat or is problematic (Robinson, 2000; Schwarz, 1990). Much data suggests people automatically evaluate current stimuli (Bargh, Chaiken, Raymond & Hymes, 1996; Duckworth, Bargh, Garcia & Chaiken, 2002) and even appraisal theorists of emotion assume that appraisal processing tends to occur automatically (Clore, 1994; Lazarus, 1995). The function of subjective affect is to inform the conscious mind about the results of unconscious appraisal (Robinson, 2000). Probably, our participants in the no load conditions were aware of influence of the communication tone on their mood (manipulation of the communication valence was quite blatant as it involved 8 negative or positive topics) and they made an effort to neutralize this influence. This correction of affective influences irrelevant to the current life situation assured mood continuity. Cognitively busy participants had no mental resources to manage their mood, so it remained a direct function of current affective states induced by the experimental manipulation.

Experiment 4

Having the saying is experiencing effect established, we turned in the last study to its possible boundary conditions. Both American (Alicke et al., 1992) and Polish (Wojciszke et al., 2008) participants widely believe that complaining has beneficial affective consequences, that it allows venting frustrations, leads to mood improvement and that people engage in complaining to achieve these effects. Three studies presented so far suggest that people are wrong in their commonsense belief in beneficial effects of complaining. Nevertheless, it cannot be excluded that people are at least sometimes right, that in some conditions complaining really leads to mood improvements and may be people overgeneralize their experience from such situations and believe that any venting of dissatisfaction has beneficial effect. So, the question is in what kind of situations complaining can lead to actual mood improvements.

Complaining is by definition a social activity – it means expressing dissatisfaction to other people. So it involves social context which was ignored in our studied reported so far. Responses of listeners are probably one important contextual factor. Showing agreement with the complaining person is the most frequent response of the audience to everyday complaints (35% of responses as found by Alicke et al., 1992). Although it may be the safest and easiest response on the side of a listening person, agreement can be also rewarding for the speaker because it conveys support for the speaker's opinions which is a case of a more general phenomenon of social reality sharing. Hardin and Higgins (1996) argue that socially shared reality serves not only the epistemic function of establishing the reliable and valid representation of the world, it also fosters interpersonal trust and reliance on each other's view of the world. If met with agreement, complaining may be a rewarding experience despite the immediate and probably short-lived mood deterioration. Such agreement needs not be actually received because sometimes a strong expectation of agreement may be enough to experience social sharing. This may be the case when people voice (negative) opinions consistent with a norm strongly shared by their audience.

To test this line of reasoning we devised a study where we asked our participants to list up to five topics they considered either right or wrong to complain about, according to what people in their immediate social milieu thought and did. Then they were asked to choose the most right or wrong topic and to write down their own opinions on the topic while being randomly assigned to the complaining or affirmation condition (i.e. they were asked for clearly negative or positive opinions about the topic). This way, half participants were prompted to show satisfaction or dissatisfaction with a topic which was strongly normative for complaining, whereas other half made the same with a topic which was counter-normative for complaining. Although numerous results suggest that complaining is a general norm in Poland (especially when talking about public and general matters, Wojciszke, 2004), normativity was established individually for each participant. Several measures were taken, most importantly a measure of mood before and after affirmation or complaining. Our main expectation was that voicing dissatisfaction with a topic most normative for complaining will actually lead to an increase in mood, that is, to an inversion of the typical saying is experiencing effect.

Method

Participants and design. Ninety-nine employees of a telecommunication firm (35 men and 64 women, mean age = 27.20 years, *SD* = 3.74) participated individually or in small groups. The basic design was 2 (tone of communication: complaining vs. affirmation) x 2 (topic normativeness for complaining: high vs. low) x 2 (time of mood measurement: before vs. after communication) with repeated measurements on the last factor.

Procedure and manipulations. Participants were asked to jot down up to five topics which were either right or wrong to complain about according to what surrounding

people typically thought and did. This way topics normative or counter-normative for complaining were established individually for each participant. Next, participants were asked to choose the topic which was the most appropriate or inappropriate for complaining and to write down their personal opinions about it. The opinions were to be either negative or positive. In this way participants were randomly assigned the communication tone (complaining vs. affirmation) condition. Before and after jotting down their opinions, participants filled a short scale measuring their mood.

Measures. The "before" and "after" measures of mood were four-item, equivalent, scales (ranging from 1 to 7) identical to those used in Experiment 1. Both scales appeared reliable with Cronbach's αs mounting to .92 and .88 in the before and after condition.

To the end of experiment, participants were asked to rate the intensity of several emotions experienced at the moment. Six of them tapped affective positivity-negativity (self-content, slightly disheartened, sad, self-confident, optimistic, joyful) and four of them tapped tension emotions (slightly embarrassed, slightly tensed, ashamed, peaceful). All emotional states were described on scales form 1 (not at all) to 7 (very much so), the averaged items served as the indices of emotion positivity (α = .84) and emotional tension (α = .80).

Results

Manipulation check. The content of opinions written down by the participants was given to three independent raters (senior students of psychology) who were blind to conditions and rated the opinions for negativity-positivity on a scale ranging from –5 (strongly negative) to 0 (neutral) to 5 (strongly positive). The raters appeared highly consistent (mean rho correlation was = .93) and their ratings were averaged yielding a positivity index that served as a manipulation check. The index was subjected to a 2 (complaining vs. affirmation) x 2 (topic) ANOVA. This analysis revealed only one significant effect – the main effect of the communication tone, F (1, 95) = 170.03, p < .001, with participants instructed to complain presenting strongly negative opinions (M = -3.06) and participants instructed to affirm presenting clearly positive ones (M = 2.48). This effect was equally strong in the normative and counter-normative topic condition.

Mood. The main analysis was performed on the final mood index in a 2 (tone: complaining vs. affirmation) x 2 (topic: normative vs. counter-normative) with the initial mood serving as a covariate. This analysis revealed a significant influence of the initial on the final mood measure, F (1, 94) = 152.80, p < .001, η^2 = .62, and a cross-over interaction between the tone and normativeness, F (1, 94) = 6.81, p = .011, η^2 = .07. As can be seen in Figure 4, when the topic was counter-normative, mood after communication was marginally higher in the affirmation than complaining condition, F (1, 45) = 2.89, p = .096, η^2 = .06 (two-tailed) replicating the saying is believing effect. However, when the communication topic was normative for complaining, the final mood (controlled for the initial mood) was significantly higher in the complaining than affirmation condition, F (1, 48) = 4.19, p = .046, η^2 = .08. This was the expected inversion of the saying is believing effect.

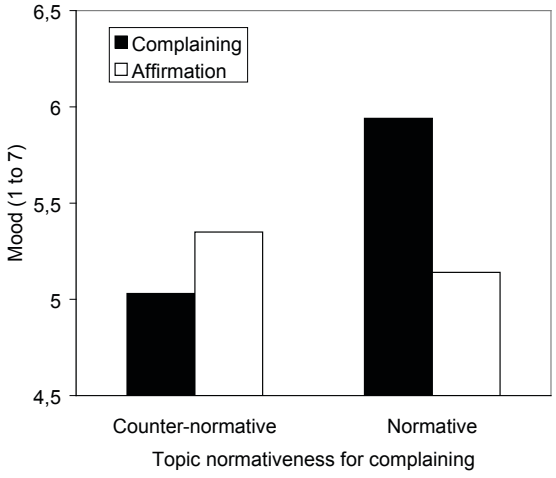

Figure 4. Mood after own complaining or affirmation on topics normative or counter-normative for complaining (Experiment 4).

Emotions. Similar analyses were performed on the emotion positivity index, revealing a tone by normativeness interaction, similar in shape to that depicted in Figure 4, although weaker and barely significant, F (1, 94) = 3.98, p = .049, η^2 = .04. Simple effect analysis (with the initial mood serving as a covariate) showed that when the topic was normative for complaining, emotional positivity was marginally higher in the complaining than affirmation condition, F (1, 48) = 3.38, p = .072. However, these two conditions did not differ when the topic was counter-normative for complaining (*M*s were 4.60 and 4.81 for complaining and affirmation respectively).

Finally, a similar two-factorial ANOVA performed on the emotional tension index showed only a marginally significant tone by topic interaction, F (1, 94) = 2.97, p = .088, η^2 = .03. When participants complained on a topic that was counter-normative for complaining they tended to report a marginally higher level of emotional tension (M = 2.88) than in the remaining conditions, which varied from 2.34 to 2.45. This is in line with the idea that compared to norm-consistent action, counter-normative behavior results in an increased tension (Festinger, 1957, Matz & Wood, 2005; Rudman & Fairchild, 2004).

Discussion

The present results show a boundary condition for the saying is experiencing effect. When the topic of communication is seen as subjectively normative for complaining, showing dissatisfaction with the topic actually increases mood of the communicator even when the communication is negative in tone. This result helps to explain why people widely believe in beneficial effects of complaining – because sometimes complaining indeed increases mood (when the topic is highly normative for dissatisfaction), people may overgeneralize this to situations where complaining actually decreases mood.

General Discussion

The presented line of studies is the first empirical demonstration of the saying is experiencing effect – that negative or positive emotional communications lead to corresponding changes in the mood of the speaker (and a listener). Complaining leads to decreases in mood while affirmation leads to immediate increases in mood. Moreover, this effect does not require cognitive resources (as Experiment 3 showed), it is observed with both explicit an implicit (Experiment 2) measures of mood, it seems to be equally strong for affirmation and complaining (Experiments 1 and 2), and it emerges after listening to communications of others (Experiment 1) as well as own communications (Experiments 2 and 3). All these additional findings consistently suggest that automatic mood contagion (Strack & Deutsch, 2004) lays at the crux of the saying is experiencing effect, rendering two other explanations of the effect improbable. These two alternative explanations delineated in the introduction – self-perception and self-awareness – assume the saying is experiencing effect to draw on highly conscious information processing which should be impaired in the cognitive load condition. Neither the self-perception nor self-awareness account predicts changes in mood after listening to other person's communications and both these accounts suggest (due to hedonistic mood regulation) that affective consequences of the emotionally laden speaking should be greater for affirmation than complaining. These results do not exclude a role of conscious self-inferences in the saying is experiencing effect, but they obviously show that such exercises are unnecessary for the effect to emerge.

We likened the present saying is experiencing effect to the classical saying is believing effect showed by Higgins and associates (Echterhoff, Higgins & Groll, 2005; Higgins & Rholes, 1978). Saying is believing effect refers to changes in opinion on a person resulting from own communication tuned to the audience. Participants convinced that the audience likes the target person tend to produce a positive message on this person and change their own memories and beliefs on this person accordingly. Participants convinced that the audience dislikes the target tend to produce a negative message on this person and follow the message in their private opinion on this person.

Despite obvious similarities between the two effects (both are biases resulting from own communications), there are also important differences between them. Whereas the saying is believing effect refers to evaluative judgments and involves stable changes in opinion and memory, the saying is experiencing effect refers to mood and involves only transitory changes. Most importantly, however, the mechanisms of the two effects differ which shows their divergent nature. While the saying is experiencing effect stems from the impulsive mood contagion, the saying is believing effect draws on reflective reasoning and depends on the communicator's conviction of sharing reality with the audience. Echterhoff et al. (2005) showed that changes in beliefs following own communication tuned to an audience disappear when the audience consists of out-groups (who do not share reality with the communicator) and that these changes are mediated by the communicators' trust in their audience's ability to judge people.

The present results suggest that affective consequences of own communications do not require the experience of sharing reality with the audience as a prerequisite. Nevertheless, such experience may play an important role, as suggested by the boundary condition of the saying is experiencing effect found in Experiment 4. When participants showed their dissatisfaction with a topic they considered most appropriate for complaining in their social milieu, their mood actually increased. This suggests that the saying is experiencing effect may be actually inversed in social contexts highly conducive to complaining. Exploration of the ways social context influences affective consequences of affirmation and complaining seems to be a promising avenue for further research on the saying is experiencing effect.

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