

# On being happy but fearing failure: The effects of mood on self-handicapping strategies

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## Abstract

Does temporary mood influence people's tendency to engage in self-handicapping behaviors? Based on past research on self-handicapping and recent work on affect and social behaviors, this experiment predicted and found that positive mood significantly increased the tendency to engage in two kinds of self-handicapping strategies. Participants ( $N = 94$ ) first received contingent or non-contingent positive feedback about performance on a task of 'cognitive abilities', and then underwent a positive, neutral, or negative mood induction using video films. Self-handicapping was assessed in terms of their subsequent preference for (a) drinking a performance-enhancing, or performance-inhibiting herbal tea, and (b) engaging or not engaging in performance-enhancing cognitive practice. As predicted, happy mood and non-contingent feedback significantly increased self-handicapping on both measures. The implications of these results for everyday performance tasks, and for recent affect-cognition theories, are discussed.

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When the chess grand master Deschappelles began to doubt his ability, he paradoxically offered every opponent an extra pawn and an extra move. This apparently self-defeating behavior gave Deschappelles a plausible excuse for defeat and earned him extra credit when he won the match (Diggle, 1958). This self-protective mechanism known as self-handicapping was first investigated empirically by Jones and Berglas (1978). Self-handicapping occurs when individuals anticipate failure on a self-relevant task and create impediments to success. Deschappelles' unorthodox approach illustrates the most striking feature of self-handicapping—that it increases the self-handicapper's risk of failure. Why then might people self-handicap given the availability of alternative self-protective strategies such as self-affirmation and self-evaluation maintenance that do

not entail self-sabotage (Hirt & McCrea, 2002; Steele, 1988; Tesser, 1988)? In addition to protecting the self from damaging attributions due to failure, we hypothesized that self-handicapping might serve a secondary purpose: to preserve a pleasant affective state. This study explored the influence of temporary mood states on people's tendency to engage in self-handicapping strategies.

## Self-handicapping: a paradoxical strategy

There are two theoretical benefits particular to self-handicapping. First, self-handicappers are protected from failure by ascribing poor performance to factors other than lack of ability. Accordingly, Deschappelles in the above example attributed lost chess games to the advantages he allowed his opponent. Second, people who succeed despite their handicaps earn extra credit for their success. The chess commentator Diggle (1958) credited Deschappelles' enduring status as a grand master to his wins from a handicapped position. In terms of Kelley's (1973) attributional

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terminology, self-handicappers *discount* ability attributions for failure by blaming the self-handicap, but can *augment* ability attributions following success.

It seems fair to assume that self-handicappers expect to feel better after self-handicapping. Indeed, evidence suggests that self-handicapping may lead to more positive mood (e.g., McCrea & Hirt, 2001; but see Zuckerman & Tsai, 2005). Unlike earlier approaches that looked at the affective consequences of self-handicapping, we focus on mood as an antecedent influence on self-handicapping. Accordingly, this study extends the recent literature documenting mood effects on social judgments and behaviors to a new domain, strategic self-handicapping.

In their original study of self-handicapping, Jones and Berglas (1978) found that people selected a performance-inhibiting drug more often when they doubted their ability to succeed on an imminent task. In the present study we also manipulated performance anxiety by providing participants either with performance-consistent, contingent, or with performance-inconsistent, non-contingent, feedback on a test of cognitive abilities. Consistent with Jones and Berglas (1978) results, we expected that non-contingent feedback should increase performance anxiety and self-handicapping.

### Mood effects on self-handicapping

Surprisingly, the influence of affect on self-handicapping received little attention to date, despite strong recent evidence that mood states do play an important role in how people attribute success and failure (Fiedler, 2001; Forgas, 1994; Forgas, Bower, & Moylan, 1990; Sedikides, 1995). For example, Forgas et al. (1990; Forgas, 1994) found that happy persons tend to take credit (make more internal attributions) when doing well, but avoid self-blame when experiencing failure. In contrast, sad people took little credit for success, but blamed themselves when they did poorly (Forgas et al., 1990). Attributions for real-life relationship conflicts showed a similar mood-induced bias (Forgas, 1994). Building on these findings, we expected that mood states might also influence the adoption of behavioral handicaps when people face performance evaluation (Forgas, 1995).

For the purposes of this research, we define moods as “low-intensity, diffuse, and relatively enduring affective states without a salient antecedent cause and ... little cognitive content” (Forgas, 1992) [p.230]. We are interested in moods rather than emotions here, as subconscious moods often have more uniform, enduring, and reliable consequences than do context-specific emotions (Forgas, 2006). Recent affect-cognition theories suggest two distinct psychological mechanisms that may explain mood effects on self-handicapping.

The mood as a resource theory suggests that happy people rely on positive moods as a resource to help them deal with aversive, but potentially useful negative feedback (Trope & Neter, 1994). However, when feedback is uninfor-

mative or unreliable, happy mood produces the opposite reaction, as people become protective of their positive moods (e.g., Aspinwall, 1998; Nygren, Isen, Taylor, & Dulin, 1996). Consistent with this reasoning, Trope, Ferguson, and Ragunathan (2001) found that happy participants sought and accepted reliable feedback. However, happy participants who doubted that the feedback was reliable avoided negative feedback in an attempt to protect their positive mood state. Typically, self-handicapping occurs when people doubt their ability and the value of receiving further feedback is low (Jones & Berglas, 1978). Accordingly, in performance situations happy persons experiencing non-contingent (ie. unreliable) feedback should engage in more self-handicapping than do people in a negative mood (Aspinwall, 1998).

Happy people are also more likely to self-handicap because losses loom larger in their minds. Numerous studies suggest that happy people are especially loss averse when facing negative outcomes and are willing to pay more to insure against possible losses (Arkes, Herren, & Isen, 1986; Nygren et al., 1996). In a similar way, we expected greater self-handicapping by happy participants here to avoid the aversive consequences of expected negative feedback.

### Aims and hypotheses

The present study was designed to demonstrate that mild mood states can influence strategic social behaviors like self-handicapping. According to previous research on self-handicapping and mood effects on social judgments and behaviors, we expected positive mood to increase self-handicapping behaviors. This hypothesis is consistent with past evidence showing that positive mood motivates self-protective attributions for success and failure (Forgas, 1994; Forgas et al., 1990), and promotes the avoidance of negative, uninformative feedback (Trope et al., 2001). Further we expected to replicate Jones and Berglas' (1978) finding that non-contingent feedback should increase the tendency to self-handicap.

### Method

#### *Overview, participants, and design*

Ninety-four first-year psychology students at the University of New South Wales, Sydney (61 females and 33 males) participated in this study for course credit. Participants received either contingent or non-contingent positive feedback on an initial verbal abilities task. Next, they watched a brief mood induction video, and were then offered two opportunities to self-handicap before expecting to undertake a second verbal abilities task: (a) drink a *performance-enhancing* or a *performance-inhibiting* herbal tea, and (b) engage, or do not engage, in performance-relevant practice. The procedure concluded with a post-experimental questionnaire, designed to validate the mood induction,

followed by a debriefing. The study was a 3 (mood manipulation: positive, neutral or negative)  $\times$  2 (feedback contingency: contingent or non-contingent) between subjects experiment.

#### *The test of verbal abilities*

We tested up to three participants in one-hour sessions, who believed that they were participating in several unrelated experiments during the session. The first task was described as a test of verbal abilities and participants were randomly assigned to answer 20 predominantly easy, or 20 predominantly indeterminate, difficult multiple-choice questions on a computer, of the type ‘Plane is to air as boat is to (a) road (b) water (c) tracks, (d) fish (*easy question*), or ‘Vegetable is to fruit as lamb is to (a) beef (b) pork (c) fish (d) chicken (*indeterminate question*). In the easy condition 16 questions were easy and four were indeterminate, and the ratio was reversed in the indeterminate condition in order to enhance the face validity of the ‘test’. At the end of the task, all participants received identical computer generated positive feedback stating that they had correctly answered 16 of the 20 questions, which placed them in the top 4% of test-takers. This feedback was designed to appear *contingent* on performance after easy questions, but *non-contingent* on performance after the difficult, indeterminate questions.

#### *The mood induction*

Next, participants watched brief films (the mood induction), described as an unrelated task to select films for a future study. They were told to watch the 10-minute edited film as if they were watching TV at home. In the positive group participants saw an excerpt from a British comedy series, the neutral group saw a nature documentary about Australia, and the negative group viewed a film dealing with death from cancer.

#### *Self-handicapping measures*

After watching the mood induction video, the experimenter explained that the psychological effects of two herbal teas would be observed on performance in a second test of verbal abilities. The two teas were described as increasing alertness, attention, and information processing and likely to improve cognitive performance, or producing relaxation, calmness and inhibiting cognitive performance. Participants were told that as both teas needed to be tested, they were free to select whichever they preferred to try. Selection of the performance-inhibiting tea was considered evidence of self-handicapping. After drinking the tea, while allegedly ‘waiting for the second verbal abilities task’ to begin, participants were given the option of either practicing verbal and logical questions, which would increase their skill in solving cognitive problems, or read a book with no effect on performance (the self-handicapping option).

#### *Check of manipulations and debriefing*

After five minutes of the selected activity, a post-experimental questionnaire was administered to validate the manipulations and control for confounding effects. Embedded among several distracter questions (eg. ‘Have you done similar tasks before? ‘Did you find the tasks difficult?’), the effectiveness of the mood manipulation was first assessed, by asking participants to rate on 7-point happy–sad, good–bad, and aroused–not aroused scales how they felt immediately after watching the video. In a further check of the personal relevance and credibility of the performance feedback provided, participants were also asked to rate how important feedback on the cognitive task was to them on a 7-point scale. As changes in mood effects may also be confounded by changes in self-esteem, participants responded to three seven-point scales designed to assess self-esteem (‘Even if I do badly, I can console myself by the fact that I am good at other things’, ‘Any errors I made were due to circumstances beyond my control’, and ‘I feel as though I have it all together’).

Finally, participants were carefully debriefed and told that it was unnecessary for them to complete the final verbal abilities task. We found no evidence of any suspicion about the manipulations, such as the veracity of the performance feedback, or the claimed effects of the tea. The high level of acceptance is consistent with the fact that we tested first year students at the beginning of the year before they had exposure to, and any opportunity to become suspicious about, experimental manipulations. Care was taken to eliminate residual mood effects.

## **Results**

Some participants were excluded from the analyses after an initial inspection of the data, because (a) they failed to correctly answer at least 12 out of the 16 questions with a solution (easy questions), and so the feedback for them might also appear as non-contingent on performance (e.g., Jones & Berglas, 1978), or (b) because they failed to make a valid response on the tea selection measure, leaving 81 participants in the final analysis for the tea selection measure, and 86 participants for the practice measure. In the absence of significant sex differences, all analyses were combined for males and females.

#### *Validation of the manipulations*

In the post-experimental questionnaire participants rated how they felt after the mood induction on three bipolar scales: happy–sad, good–bad (measuring mood valence), and aroused–not aroused (measuring arousal). As the ratings on the happy–sad and good–bad scales were highly correlated, they were combined to create a single mood valence measure ( $\alpha = .87$ ). An analysis of variance of the combined mood self-ratings confirmed that there was a highly significant overall difference between the three mood

conditions in the expected direction,  $F(2.78) = 50.90$ ,  $p < .001$ . Happy participants felt significantly better,  $F(1.51) = 19.18$ ,  $p < .001$ , and sad participants felt significantly worse,  $F(1.54) = 35.88$ ,  $p < .001$  than did the neutral group (happy:  $M = 6.52$ ,  $SD = .92$ ; neutral:  $M = 5.39$ ,  $SD = .95$ ; sad:  $M = 3.52$ ,  $SD = 1.36$ ). These results confirm that the mood induction procedure was highly effective and induced the intended affective states.

We also found that the mood induction did not influence self-reported arousal levels. Participants in the positive condition ( $M = 5.52$ ,  $SD = 1.45$ ) did not differ in their self-reported levels of arousal from participants in the neutral condition ( $M = 5.10$ ,  $SD = 1.40$ ),  $t(56) = 1.11$ ,  $p > .2$ , or the negative condition ( $M = 4.89$ ,  $SD = 1.42$ ),  $t(55) = 1.66$ ,  $p > .10$ . Similarly, arousal levels did not differ between participants in the neutral and negative mood conditions,  $t(55) = .58$ ,  $p > .5$ . This confirms that the mood induction was effective, influencing only the valence of experienced mood, without also influencing arousal.

As we expected, participants indicated that feedback on the verbal abilities task was credible and highly important to them ( $M = 6.44$ ,  $SD = 1.24$ ),  $t(85) = 17.81$ ,  $p < .001$ . This measure did not differ across the six conditions, all  $ps > .85$ , establishing that cognitive ability was equally important to participants in all conditions. This was also confirmed during debriefing when none of the participants suspected that the feedback was fabricated.

### Self-handicapping measures

**Tea selection measure.** In order to examine the effects of mood and feedback contingency on tea choice, a 3 (mood: negative, neutral, positive)  $\times$  2 (feedback contingency: contingent vs non-contingent)  $\times$  2 (tea choice: enhancing, inhibiting) loglinear analysis was performed, using a family-wise error rate of .05. As expected, a greater percentage of participants who received non-contingent positive feedback selected the inhibiting tea (52%), compared to participants who received contingent positive feedback (26% of participants),  $Wald \chi^2(1, N = 81) = 6.23$ ,  $p < .02$ . This result also held within each mood condition, as a larger number of participants selected the inhibiting tea when the feedback they received was non-contingent rather than contingent within each mood group (happy: 75% vs. 45%; neutral: 40% vs. 14%; sad: 47% vs. 21%). This result confirms Jones and Berglas (1978) finding that non-contingent feedback induces greater self-handicapping than contingent positive feedback, as people who receive non-contingent feedback doubt that they can perform well again.

A similar loglinear analysis was performed to examine the effects of mood on tea selection. As illustrated in Fig. 1, a greater proportion of participants in the positive mood condition selected the inhibiting tea (61%) than participants in the negative and neutral conditions (31% averaged across both conditions),  $Wald \chi^2(2, N = 81) = 6.22$ ,  $p < .05$ . In addition, the simple comparisons between the positive, neutral (28%), and negative (34%) conditions also

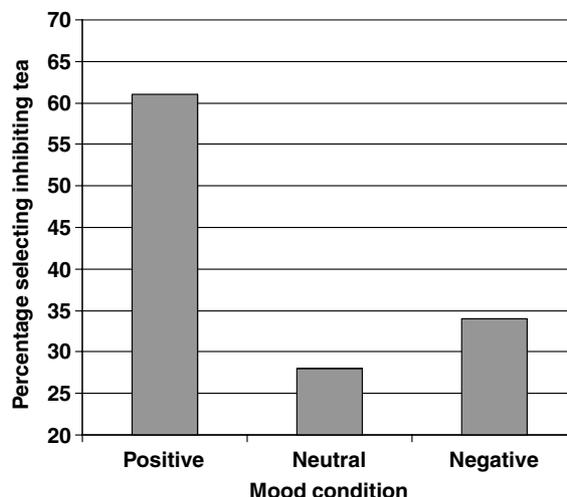


Fig. 1. The effects of induced mood on self-handicapping: percentage of participants who selected the performance impairing tea as a function of mood condition.

approached significance,  $Wald \chi^2(2, N = 54) = 5.79$ ,  $p < .06$  and  $Wald \chi^2(2, N = 57) = 3.68$ ,  $p < .16$ , respectively. Participants in the neutral and negative mood conditions did not significantly differ in their tea selection behavior,  $Wald \chi^2(2, N = 61) < 1$ . These results confirm that, consistent with our predictions, positive mood significantly increased the tendency to self-handicap compared to those in a negative or neutral mood. Although there were no significant loglinear interactions between the feedback contingency and mood conditions, all  $Wald \chi^2s < 1$ , the combination of positive mood and non-contingent feedback produced the highest proportion of self-handicapping relative to the other five conditions (proportions were significantly different according to Wilson's (1927) test:  $p < .05$ ).

**Practice measure.** The second measure of self-handicapping, willingness, or refusal to engage in effortful task-relevant practice, was also subjected to loglinear analyses. As expected, a significantly greater percentage of participants self-handicapped in the non-contingent feedback condition (64% avoided task-relevant practice) than in the contingent feedback condition (39% avoided task-relevant practice),  $Wald \chi^2(1, N = 86) = 4.54$ ,  $p < .05$ .

As depicted in Fig. 2, the pairwise mood main effect comparisons on this variable reveal a similar pattern of results to those on the tea selection measure. Specifically, participants in the positive mood condition choose the non-helpful task (reading) more often (68%) than did participants in the neutral mood (48%) and sad mood (44%) conditions,  $Wald \chi^2(2, N = 86) = 2.24$ ,  $p < .20$ ;  $Wald \chi^2(2, N = 86) = 4.02$ ,  $p < .05$ , respectively. A post-hoc contrast comparing task choice in the positive mood condition vs. the negative and neutral conditions showed that positive mood participants chose the non-helpful task significantly more often than did participants in the other conditions,  $Wald \chi^2(1, N = 86) = 4.01$ ,  $p < .05$ . As this measure was administered after the tea selection task, the slightly weaker mood effects may be due to mood decay, and having

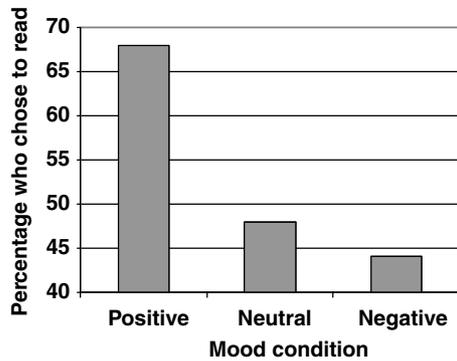


Fig. 2. The effects of mood on self-handicapping: voluntary practice measure. Percentage of participants who chose to read rather than engage in performance-enhancing practice as a function of mood condition.

already chosen a handicapping option previously. As with the tea selection variable, there was no significant interaction between feedback contingency and mood conditions, all *Wald*  $\chi^2$ s < 1.

#### Additional analyses and alternative explanations

A number of further analyses were also carried out to clarify the mechanisms producing these effects and to eliminate alternative explanations. For example, it was possible that people in a positive mood selected the relaxing tea, and avoided exercise not in order to self-handicap, but simply to minimize effort and maintain their current positive mood (the mood-maintenance explanation: Clark & Isen, 1982). Several arguments speak against such an explanation, however. First, there is no differential effort involved in selecting one tea rather than another, so evidence for significant self-handicapping on this first measure is unlikely to be fully explained in terms of increased effort avoidance or mood-maintenance by happy people. If effort avoidance drove these effects, we should also find a stronger handicapping effect on the second measure, involving effortful activity, than the first one involving little or no effort. Again, this was not the case here.

In order to gain further insight into underlying motivations, the pattern of self-handicapping decisions was subjected to more fine-grained analysis. In particular, there is strong evidence from prior research that self-handicappers are highly attuned to how they and others interpret their attempts to self-handicap, and most typically will adopt the first available handicap, while eschewing subsequent handicaps that might make their attempts to escape feedback too obvious (Self, 1991). Is this what happened here?

We first examined the behavior patterns of self-handicappers (people who adopted at least one of the handicaps;  $N = 62$ ) to discover who were most likely to select the first available handicap (the inhibiting tea), and who waited till the second, more effortful alternative. Of all handicappers, 74% in happy mood selected the first available handicap, the inhibiting tea, whereas on average only 46% of the sad and neutral participants selected the first option,  $\chi^2$  (1,

$N = 62$ ) = 3.91,  $p < .05$ . If positive mood simply motivated participants to maintain good mood by avoiding effort (Clark & Isen, 1982), avoiding effortful practice on the second task should have been their preferred strategy. In fact exactly the opposite occurred here: happy participants preferred more the first option that involved no obvious effort saving, and it was sad and neutral handicappers who were more likely to choose the second, effort avoidant option. In other words, the pattern of choices by happy participants is consistent with the typical pattern of self-handicapping observed in the literature (Self, 1991), showing self-handicapping on the first available task even though it did not involve effort minimization.

Further analysis revealed that of all self-handicappers, the majority (67%) selected the inhibiting tea after receiving non-contingent feedback, whereas only 40% selected the inhibiting tea after receiving contingent feedback,  $\chi^2$  (1,  $N = 62$ ) = 4.09,  $p < .05$ . Again, the second strategy involving effort avoidance was less likely to be used when self-handicapping was most expected (after non-contingent feedback), than after contingent feedback. These analyses support the view that happy self-handicappers and those who received non-contingent feedback were most likely to exploit the first available opportunity to self-handicap and were less likely to use the second, practice-avoidance strategy. Conversely, effort avoidance was used comparatively more in conditions when self-handicapping was not predicted. This pattern of choices is consistent with the prediction that self-handicapping rather than mood-maintenance was the dominant strategy in the critical happy/non-contingent feedback group.

In order to further confirm the nature of these mood effects, we also conducted two additional chi-square tests to show that our mood main effect findings held even when we looked only at participants' behavior in the non-contingent feedback conditions. Specifically, non-contingent feedback is said to elicit "true" self-handicapping, as the associated performance anxiety makes the spectre of failure particularly salient. On both the tea selection and practice measures, happy participants who received non-contingent positive feedback (75% and 79% selected each handicap, respectively) self-handicapped more often than did neutral mood and sad participants who received non-contingent positive feedback (43% and 48% selected each handicap, respectively),  $\chi^2$  (1,  $N = 29$ ) = 3.60,  $p = .06$  and  $\chi^2$  (1,  $N = 30$ ) = 3.45,  $p = .06$ , respectively. Thus, the mood main effect also held as a simple effect in the presence of performance anxiety induced by non-contingent feedback, a traditional elicitor of self-handicapping.

Another possible alternative explanation for our findings is that the mood induction influenced self-esteem rather than mood. Given that self-esteem is associated with higher self-handicapping, perhaps happy participants engaged in more self-handicapping because they experienced heightened situational self-esteem in the presence of positive mood? To test this possibility, we compared participants' ratings on several self-esteem items (e.g., 'Even if I

do poorly today, I know I am good at other things'). We found no differences across the mood conditions on any of the measures (all  $ps > .47$ , mean pairwise  $p = .84$ ), confirming that positive mood, rather than self-esteem, elicited self-handicapping behavior in this study.

Finally, although arousal did not differ significantly across the mood conditions, happy participants were slightly more aroused than sad and neutral mood participants. Could it be that happy participants selected the impairing tea in an attempt to alleviate their arousal, rather than as a means of self-handicapping? Reassuringly, we found that participants who selected the impairing tea ( $M = 4.97$ ,  $SD = 1.38$ ) were not in fact more aroused than those who selected the performance-enhancing tea ( $M = 5.40$ ,  $SD = 1.56$ ),  $t(79) = 1.25$ ,  $p = .22$ . Indeed, the means suggest that aroused participants tended to prefer the performance enhancing tea more. This pattern also held amongst happy participants, as those who selected the impairing tea ( $M = 5.57$ ,  $SD = 1.40$ ) were slightly less aroused than those who selected the enhancing tea ( $M = 6.22$ ,  $SD = 1.56$ ),  $t(23) = 1.04$ ,  $p = .31$ .

Thus, these supplementary analyses confirm that happy participants did not self-handicap merely because they wanted to avoid effort to maintain good mood, or experienced elevated states of impulsiveness, situational self-esteem, or arousal. The elimination of these potential alternative accounts supports our contention that mood directly influenced the motivation to self-handicap.

## Discussion

Life often presents us with situations laden with the possibility of failure. The self-handicapping literature shows that people often adopt sophisticated strategies to protect themselves from having to attribute failure internally (Hirt & McCrea, 2002). Self-handicapping is a profoundly affect-driven strategy, as its objective is the promotion of self-esteem and the avoidance of negative affective states (McCrea & Hirt, 2001). It is surprising then that the effects of induced mood states on the tendency to self-handicap have not been investigated previously. Our results showed that positive mood increased people's tendency to self-handicap on two complementary measures. These findings have several interesting theoretical and practical implications.

### Theoretical implications

Recent research established that moods have a wide-ranging influence on cognitive and behavioral processes in social situations (Bless & Fiedler, 2006; Fiedler, 2001; Forgas, 2002, 2006). However, such mood effects are highly context-sensitive, and often depend on the kinds of information processing strategies people adopt to deal with a particular situation (Fiedler, 2001; Forgas, 1995, 2002). Our findings are broadly consistent with prior research suggesting that happy people often behave in ways designed to

maintain their good mood. Thus, happy persons take credit for successes but reject blame when they fail (Forgas et al., 1990), and make more benevolent attributions for their interpersonal conflicts when in a positive mood (Forgas, 1994). Greater self-handicapping in positive mood is consistent with such an affect-maintenance strategy.

We also demonstrated that the observed self-handicapping choices were neither random nor arbitrary, and could not be explained as simple effort avoidance. The greatest degree of self-handicapping (in the positive mood, non-contingent feedback condition) actually involved less effort minimization than did other groups. Similarly, neither differences in arousal, nor differences in self-esteem could provide a plausible alternative explanation for our findings. Thus, the data are consistent with our hypothesis that moods have a direct influence on self-handicapping strategies.

However, these effects might well be subject to boundary conditions. As Trope et al. (2001) showed, positive mood may sometimes function as a resource, allowing happy people to deal with adverse information, if it is seen as reliable and useful. Interestingly we found that happy persons engaged in more self-handicapping even when the previous feedback they received was 'correct', ie., contingent on actual performance. Future experiments may explore how the perceived utility of negative feedback may influence mood effects on self-handicapping (Trope et al., 2001).

We found that mood and feedback contingency had an independent non-interactive effect on self-handicapping. This pattern is consistent with our theoretical expectations. As contingent feedback also generates some performance anxiety, positive mood should increase the tendency to self-handicap in both feedback conditions, as was found here.

It is also interesting that we found a positive mood effect on both self-handicapping measures, while the negative and neutral groups performed similarly. Thus, even though succeeding despite a handicap might make people feel good (Urdan & Midgley, 2001), there is little evidence that sad participants employed self-handicapping as a mood repair strategy. The absence of negative mood effects suggests that people mostly self-handicap defensively, to *discount* (Kelley, 1973) distressing self-attributions of failure, but not to improve existing aversive states. This is consistent with previous evidence suggesting that people rarely self-handicap to augment attributions of success to ability (e.g., Mayerson & Rhodewalt, 1988; Rhodewalt, Morf, Hazlett, & Fairfield, 1991; Tice, 1991). Similarly, high self-esteem individuals handicap more than do people with low self-esteem (Hirt & McCrea, 2002; Self, 1991; Tice & Baumeister, 1984). This pattern suggests that self-handicapping is essentially a preventive, defensive strategy, directed at avoiding negative outcomes, and not a promotion strategy designed to improve negative states or achieve positive outcomes (Higgins, Grant, & Shah, 2001). The absence of a negative mood effect on self-handicapping appears consistent with such a view.

### Practical implications

Given the prevalence of achievement situations in everyday life, the effects of positive mood on promoting self-handicapping has some interesting practical implications. For example, self-handicapping is common among elite sports people (Bailis, 2001), as the pressure to perform provides strong incentives to engage in self-protective behaviors. Mood effects on self-handicapping among athletes and others exposed to performance pressures deserves further investigation (Bailis, 2001). Affective influences on self-handicapping may also be important in organizational, forensic, clinical, and educational settings where the combination of mood and habitual exposure to aversive feedback may promote the use of self-handicapping strategies (Ciarrochi, Forgas, & Mayer, 2006).

Much of the applied literature in organizational and health psychology emphasizes the benefits of positive mood (Ciarrochi et al., 2006; Forgas & George, 2001). In contrast, our findings, together with numerous recent experimental studies, suggest that positive affect may also have undesirable consequences. For example, positive moods may increase judgmental errors (Forgas, 1998), reduce eyewitness accuracy (Forgas, Vargas, & Laham, 2005), and may compromise interpersonal effectiveness (Forgas, in press). Our results show that people in a positive mood are also more likely to engage in self-handicapping, even at the cost of jeopardizing future performance. These findings thus extend the literature on mood effects in applied settings (Fiedler, 2001; Fiedler & Bless, 2001; Forgas, 2002) by showing that the threat of failure may selectively activate self-protective mechanisms in happy people.

### Limitations and future prospects

Mood effects on cognition and behavior are often quite subtle, and may be highly sensitive to pragmatic and situational variables and the kind of processing strategy adopted (Fiedler, 2001; Forgas, 1995, 2002). There is considerable scope in future studies to explore how pragmatic variables such as the personality and motivations of the actor and the usefulness of the anticipated feedback may mediate mood effects on self-handicapping (Trope et al., 2001). It would also be important to demonstrate the generalizability of our results in real-life situations. Given the similarity of the results across the two self-handicapping measures, their consistency with recent theories linking affect and behavior (Forgas, 2006; Forgas et al., 1990), and the evidence here against several alternative explanations, the effects demonstrated here do appear to be robust and reliable.

Consistent with most previous research on self-handicapping, we used only positive (contingent and non-contingent) feedback here. The likelihood of mood effects on self-handicapping following negative feedback deserves further investigation (Hirt & McCrea, 2002). In addition, future studies might also look at the consequences of specific emotions, such as fear, disgust, and anger on self-handicapping

(e.g., Lerner & Keltner, 2001). Given that fear and disgust are often associated with avoidant behaviours, whereas anger tends to elicit approach motivations, these emotions may well have a differential influence on self-handicapping behaviors.

Coping with the potentially adverse effects of negative feedback is a common challenge for all of us. The way we manage such challenges shapes our ability to learn from negative outcomes, and to adapt to novel situations. Recent research suggests that mood is a key factor in how people think and behave in everyday social situations (Forgas, 2002, 2006). Our results suggest that positive mood may increase the tendency to self-handicap when the value of feedback is uncertain. Much has been discovered about the cognitive and behavioral effects of mild mood states, yet not enough is known about how feelings influence motivated behaviors such as self-handicapping. Our findings seem broadly consistent with recent affect-cognition theorizing (Bless & Fiedler, 2006; Fiedler, 2001; Forgas, 1995, 2002), and suggest that further research on affective influences on self-handicapping strategies should be of considerable theoretical as well as applied interest.

### References

- Arkes, H. R., Herren, L. T., & Isen, A. M. (1986). The role of potential loss in the influence of affect on risk-taking behavior. *Organizational Behavior and Human Decision Processes*, 42, 181–193.
- Aspinwall, L. G. (1998). Rethinking the role of positive affect in self-regulation. *Motivation and Emotion*, 22, 1–32.
- Bailis, D. (2001). Benefits of self-handicapping in sport: a field study of university athletes. *Canadian Journal of Behavioral Science*, 33, 213–223.
- Bless, H., & Fiedler, K. (2006). Mood and the regulation of information processing and behavior. In J. P. Forgas (Ed.), *Affect in social thinking and behavior* (pp. 65–84). New York: Psychology Press.
- Ciarrochi, J. V., Forgas, J. P., & Mayer, J. D. (Eds.). (2006). *Emotional intelligence in everyday life* (2nd ed.). Philadelphia: Psychology Press.
- Clark, M. S., & Isen, A. M. (1982). Towards understanding the relationship between feeling states and social behavior. In A. H. Hastorf & A. M. Isen (Eds.), *Cognitive social psychology* (pp. 73–108). New York: Elsevier-North Holland.
- Diggle, G. H. (1958). Untitled. *BCM*, July, 184–187.
- Fiedler, K. (2001). Affective influences on social information processing. In J. P. Forgas (Ed.), *The handbook of affect and social cognition* (pp. 163–185). Mahwah, NJ: Erlbaum.
- Fiedler, K., & Bless, H. (2001). The formation of beliefs in the interface of affective and cognitive processes. In N. Frijda, A. Manstead, & S. Bem (Eds.), *The influence of emotions on beliefs*. New York, NY: Cambridge University Press.
- Forgas, J. P. (1992). Affect in social judgments and decisions: A multi-process model. In M. Zanna (Ed.), *Advances in experimental and social psychology* (Vol. 25, pp. 227–275). San Diego, CA: Academic Press.
- Forgas, J. P. (1994). Sad and guilty? Affective influences on explanations of conflict episodes. *Journal of Personality and Social Psychology*, 66, 56–68.
- Forgas, J. P. (1995). Mood and judgment: The affect infusion model (AIM). *Psychological Bulletin*, 117, 39–66.
- Forgas, J. P. (1998). On being happy but mistaken: Mood effects on the fundamental attribution error. *Journal of Personality and Social Psychology*, 75, 318–331.
- Forgas, J. P. (2002). Feeling and doing: affective influences on interpersonal behavior. *Psychological Inquiry*, 13, 1–28.

- Forgas, J. P. (Ed.). (2006). *Hearts and minds: Affective influences on social thinking and behavior*. New York: Psychology Press.
- Forgas, J. P., Bower, G. H., & Moylan, S. J. (1990). Praise or blame? Mood effects on attribution for success or failure. *Journal of Personality and Social Psychology, 59*, 809–819.
- Forgas, J. P., & George, J. M. (2001). Affective influences on judgments and behavior in organizations: an information processing perspective. *Organizational Behavior and Human Decision Processes, 86*, 3–34.
- Forgas, J. P. (in press). When sad is better than happy: mood effects on the effectiveness of persuaders. *Journal of Experimental Social Psychology*.
- Forgas, J. P., Vargas, P., & Laham, S. (2005). Mood effects on eyewitness memory: affective influences on susceptibility to misinformation. *Journal of Experimental Social Psychology, 41*, 574–588.
- Higgins, E. T., Grant, H., & Shah, J. (2001). Self-regulation and quality of life: Emotional and non-emotional life experiences. In J. P. Forgas (Ed.), *The handbook of affect and social cognition*. Mahwah, NJ: Erlbaum.
- Hirt, E. R., & McCrea, S. M. (2002). Positioning self-handicapping within the self-zoo: Just what kind of animal are we dealing with? In J. P. Forgas & K. D. Williams (Eds.), *The social self: Cognitive, interpersonal and intergroup perspectives* (pp. 97–120). New York: Psychology Press.
- Jones, E. E., & Berglas, S. (1978). Control of attributions about the self through self-handicapping strategies: the appeal of alcohol and the role of underachievement. *Personality and Social Psychology Bulletin, 4*, 200–206.
- Kelley, H. H. (1973). The process of causal attribution. *American Psychologist, 28*, 107–128.
- Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology, 81*, 146–159.
- Mayerson, N. H., & Rhodewalt, F. (1988). The role of self-protective attributions in the experience of pain. *Journal of Social and Clinical Psychology, 6*, 203–218.
- McCrea, S. M., & Hirt, E. R. (2001). The role of ability judgments in self-handicapping. *Personality and Social Psychology Bulletin, 27*, 1378–1389.
- Nygren, T. E., Isen, A. M., Taylor, P. J., & Dulin, J. (1996). The influence of positive affect on the decision rule in risk situations: focus on outcome rather than probability. *Organizational Behavior and Human Decision Processes, 66*, 59–72.
- Rhodewalt, F., Morf, C., Hazlett, S., & Fairfield, M. (1991). Self-handicapping: the role of discounting and augmentation in the preservation of self-esteem. *Journal of Personality and Social Psychology, 61*, 122–131.
- Sedikides, C. (1995). Central and peripheral self-conceptions are differentially influenced by mood: tests of the differential sensitivity hypothesis. *Journal of Personality and Social Psychology, 69*, 759–777.
- Self, E. A. (1991). Situational influences on self-handicapping. In R. L. Higgins, C. R. Snyder, & S. Berglas (Eds.), *Self handicapping: The paradox that isn't* (pp. 37–65). New York: Plenum.
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of self. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 261–302). New York: Academic Press.
- Tesser, A. (1988). Towards a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 181–228). New York: Academic Press.
- Tice, D. M. (1991). Esteem protection or enhancement? Self-handicapping motives and attributions differ by trait self-esteem. *Journal of Personality and Social Psychology, 60*, 711–725.
- Tice, D. M., & Baumeister, R. F. (1984). Self-handicapping, self-esteem and self-presentation. In R. L. Higgins, C. R. Snyder, & S. Berglas (Eds.), *Self handicapping: The paradox that isn't* (pp. 187–238). New York: Plenum.
- Trope, Y., Ferguson, M., & Ragunathan, R. (2001). Mood as a resource in processing self-relevant information. In J. P. Forgas (Ed.), *Handbook of affect and social cognition*. Mahwah, NJ: Erlbaum.
- Trope, Y., & Neter, E. (1994). Reconciling competing motives in self-evaluation: the role of self-control in feedback seeking. *Journal of Personality and Social Psychology, 66*, 646–657.
- Urdu, T., & Midgley, C. (2001). Academic self-handicapping: what we know, what more there is to learn. *Educational Psychology Review, 13*, 115–138.
- Wilson, E. B. (1927). Probable inference, the law of succession, and statistical inference. *Journal of the American Statistical Association, 22*, 209–212.
- Zuckerman, M., & Tsai, F. (2005). Costs of self-handicapping. *Journal of Personality, 73*, 411–442.