Are you being served…? An unobtrusive experiment of affective influences on helping in a department store

JOSEPH P. FORGAS*, ELIZABETH DUNN[a]
AND STACEY GRANLAND
University of New South Wales, Sydney, Australia

Abstract

Based on recent theories of affect and cognition, this unobtrusive field experiment predicted and found that induced positive mood improved real-life customer service behaviors by less experienced sales staff, but had no effect on the behaviors of experienced long-term staff in several department stores. Positive or negative mood was unobtrusively induced in sales staff in major department stores by a confederate. A second confederate, blind to the mood induction, then asked employees for help to locate a non-existent item. The frequency and duration of helpful behaviors in response to the request was recorded. Consistent with Forgas' Affect Infusion Model (AIM), less experienced employees showed a significant mood-congruent pattern in their responses helping more in a positive than in a negative mood. Long-term employees who could rely on routine, direct access processing were not influenced by the mood induction. The implications of these findings for contemporary affect-cognition theorizing and for everyday affective influences on interpersonal behaviors and customer service delivery are considered. Copyright © 2007 John Wiley & Sons, Ltd.

What is the role of mood in real-life interpersonal behaviors? More specifically, are customer service employees more likely to be helpful when they are surreptitiously induced to be in a good mood? Although affect has an important influence on many social judgments and behaviors (Bohner & Waenke, 2003; Fiedler & Bless, 2001; Forgas, 2002), the influence of moods on real-life social interactions, including helping and customer service behaviors, has received less than adequate experimental attention (Forgas & George, 2002). Extrapolating from recent affect-cognition theories to a field setting, we explore the hypothesis that positive moods produce a mood-congruent effect and lead to more positive and helpful behaviors, but that this effect is moderated by the level of expertise of the employees. Consistent with theories such as the Affect Infusion Model (AIM) (Forgas, 2002), we expected less experienced short-term employees to show greater mood dependence than do long-term employees who have already developed stable and routine patterns of customer service responses.

*Correspondence to: Joseph P. Forgas, School of Psychology, University of New South Wales, Sydney 2052, Australia.
E-mails: jp.forgas@unsw.edu.au; www.psy.unsw.edu.au/~joef/jforgas.htm
[a]Elizabeth Dunn is now at the University of British Columbia, Vancouver, Canada.

Mood and Customer Service

Customer service involves the role-prescribed helping of customers, and can be influenced by a number of stable, external factors such as training, supervision, and group atmosphere (George, 1998; George & Bettenhausen, 1990). Extrapolating from laboratory evidence for mood effects on judgments and interpersonal behaviors (Bless & Fiedler, 2006; Fiedler, 2001; Fiedler & Bless, 2001; Forgas, 1995, 2002), we may expect that an individual's mood state may also influence customer service behaviors. Surprisingly, there has been little work extending laboratory research to real-life settings and we do not yet fully understand how and why short-term moods may impact on customer service behaviors.

Mood is belatedly recognized as an essential influence on many interactive behaviors (Forgas, 2002) and a key factor in the way people behave in organizational settings (Forgas & George, 2002; George, 1998), with a marked impact on work performance and productivity (Carlson, Charlin, & Miller, 1988; Wright & Staw, 1998). Although positive moods often promote more positive behaviors and more positive perceptions of people and situations (Clark & Isen, 1982; Forgas, 1995, 2002; Salovey, Mayer, & Rosenhan, 1991; Wright, Cropanzano, & Meyer, 2004), these effects are by no means universal. Not enough is yet known about the circumstances that moderate mood effects on real-life interpersonal behaviors (Forgas, 2002) and there is little prior experimental work exploring mood effects on actual service delivery in a realistic retail setting.

Research on mood effects on helping suggests that positive mood often produces a mood-congruent effect, facilitating more positive interpersonal behaviors and greater helping (Forgas, 2002). However, motivational processes can override such mood-congruent effects, for example, when the helping task is avoided because it is costly or distasteful and may jeopardize the positive mood state (Clark & Isen, 1982; Salovey et al., 1991). Indeed, sometimes people in temporary negative moods may help more in a motivated attempt to improve their aversive moods by helping others (e.g. Cialdini & Fultz, 1990).

In addition to such motivational influences, our experiment will explore the possibility that individuals who have a richer repertoire of ready-made, directly accessible responses to helping requests (such as experienced sales staff) should be less influenced by temporary mood than are less experienced employees who are more likely to process helping requests in an open, constructive manner. In other words, mood effects on positive interpersonal responses should be moderated by staff experience and the availability of routine, directly accessible responses.

Affective Influences on Interpersonal Behaviors

Affective experiences penetrate every aspect of our lives and moods often have a strong mood-congruent influence on thinking, judgments and behaviors (Bless, 2001; Fiedler, 2001; Forgas, 2002; Sedikides, 1995). Moods may influence some interpersonal behaviors due to the *affect priming* mechanism (Bower, 1991; Forgas, 1995). According to this view, mood should selectively prime and facilitate the use of mood-congruent ideas and associations in the course of constructive, elaborate cognitive and behavioral tasks, such as when performing customer service behaviors. Numerous studies confirm that individuals in a positive mood indeed form significantly more positive, lenient, and benevolent interpretations of both people and social situations and act in a more cooperative and confident manner (Fiedler & Bless, 2001; Forgas, 1995, 1998, 2002; Sedikides, 1995).

However, these effects are not universal. An integrative theory of affective influences on thinking, the Affect Infusion Model (AIM; Forgas, 1995, 2002) predicts that affect congruence should depend on

the kind of processing strategy used. The model suggests that mood congruence should be greatest in circumstances when people need to use an open, constructive processing strategy. This counterintuitive prediction has now been confirmed in a number of controlled laboratory experiments (Fiedler, 2001; Forgas, 1995; Forgas & Locke, 2005; Sedikides, 1995). In contrast, mood congruency should be weak or absent when either *direct access* or *motivated processing* strategies make use of affectively primed information unnecessary (Forgas, 2002). Consistent with these predictions, several studies in the helping literature found that motivated processing can override simple mood-congruent effects on positive interpersonal behaviors (Carlson & Miller, 1987; Cialdini & Fultz, 1990; Clark & Isen, 1982; Salovey et al., 1991).

However, there has been little direct evidence in the past demonstrating the elimination of affect congruence in conditions when people can use highly rehearsed, direct access responses and none have done so in a real-life field setting using unobtrusive methods. Accordingly, this experiment predicted that when helping customers in a department store, experienced longer term sales employees are more likely to use *direct access* processing by accessing a response from their extensive and well-rehearsed repertoire of responses to customer questions and should thus be less influenced by temporary mood effects. Less experienced employees on the other hand are more likely to resort to on-line, constructive processing when receiving an unexpected or problematic customer request. Extrapolating from the Affect Infusion Model (AIM; Forgas, 1995, 2002), this study sought to demonstrate that induced moods should significantly influence customer service responses by inexperienced employees, but not by long-term, experienced employees who are more able to rely on direct access responses.

METHOD

Overview

Department store employees were approached by a confederate who delivered a positive, neutral, or negative mood induction to randomly selected employees by offering unsolicited affect-inducing comments. Shortly thereafter, a second confederate, blind to the mood induction, approached the same employees and asked for customer service. The employees' objective and subjective helping behaviors were assessed by the second confederate.

Participants

Participants were 48 female and 13 male casual sales staff at four major Target department stores in Sydney, Australia. They were all employed at the same level (casual sales staff), with a median length of employment of 14.7 months. Using a median split as the criterion, employees below the median were classified as less experienced, shorter term staff with a mean employment length of 7.6 months, and those above the median were classified as longer term employees with a mean employment length of 41.3 months. Permission to conduct the study was obtained from store management, but individual employees were not informed about the study. As one participant (in the happy, short-term condition) scored more than four standard deviations above the mean on two dependent measures, her scores were excluded from the analysis.

Procedure

Staff members were randomly assigned to one of the three mood conditions and were first exposed to the positive, neutral, or negative mood induction by the first experimenter. They approached each randomly selected employee and delivered the mood induction, saying 'I just wanted to let someone know that I am so impressed with the service at this store. The store looks great and the staff are so nice. I was able to get what I wanted and I'll be coming back to this store again' (positive condition) or 'I just wanted to let someone know that I am so disappointed with the service at this store. The store looks terrible and the staff are rude. I couldn't get anything I wanted and I won't be coming back here again' (negative condition). In the neutral control condition the confederate said 'Interesting, I have been coming here quite regularly, and this store seems always the same, nothing much changes'. This mood induction method, relying on the delivery of positive or negative feedback, has been shown to be highly reliable and effective in inducing moods in numerous laboratory studies, and easily adapted for use in a field setting (Forgas, 1995, 2002).

The effectiveness of the mood induction was separately established in a pilot study, where 30 randomly selected employees in the same department store chain received the positive, neutral, and negative induction. Their self-rated mood on seven-point happy–sad scales was subsequently assessed, and showed the predicted significant mood effect, thus confirming the effectiveness of the mood induction.[1] Further, the mood induction worked equally well for short-term and long-term employees, establishing that observed differences were not due to more experienced employees simply being more impervious to the mood induction. As there is also a possibility that the mood induction may also influence self-esteem, state self-esteem was also assessed on a seven-point 'Right now, I feel good about myself—I don't feel good about myself' scale. Results showed that state self-esteem was not influenced by the mood manipulation across any of the groups.[2]

In the main study, a few seconds after the mood induction, the second confederate approached the same staff member and requested help in finding a book that did not really exist: 'Excuse me, could you please tell me where to find a book called *The White Bear*?' Confederate 2 then surreptitiously recorded the staff member's objective and subjective helping behaviors in response to this request by writing notes into a small notebook during the interaction, casually described to the sales employee as 'checking my shopping list'.

Confederates

Four men and seven women were trained as confederates, who took turns playing each role (inducing mood or seeking help). The second confederate always remained blind to mood condition by staying away during the mood induction phase. Confederates were trained to behave in a standardized fashion and to provide scripted responses to any questions asked by participants. The gender composition of the confederates was counterbalanced within each mood condition.

Dependent Measures

Three behavioral measures assessing the employee's helpfulness were surreptitiously recorded by Confederate 2: (1) The *number of helpful responses* was assessed by recording and adding the number

---

[1]The results of the pilot study indicated significant differences in mood between happy and sad $t(19) = 4.87$; $p < .01$, happy and neutral $t(19) = 3.43$; $p < .01$, and neutral and sad groups $t(19) = 4.04$; $p < .01$ ($M = 2.31$ vs. 3.86 vs. 5.05).
[2]$t(19) < .82$; *NS*.

of helpful customer service behaviors exhibited, such as giving directions, making sure the customer found the section, taking the customer to the book department, asking further questions, offering to check further, offering to check the storeroom, offering alternatives, and suggesting alternate stores. (2) The *number of actual attempts* staff members themselves made to find the book (on different shelves, different areas, etc.) was also recorded. (3) The *time spent helping* was also surreptitiously recorded by Confederate 2 using a stopwatch to time how long staff members persevered in providing assistance. As these three behavioral measures were highly correlated ($r = .89$), they were each re-scaled to a 1–10 interval scale and were averaged to create a single measure of *behavioral helpfulness*. In addition, *subjective ratings* of the staff member were also provided by Confederate 2 immediately after the encounter, who rated their degree of *courtesy, politeness, friendliness*, and *responsiveness* on eight-point scales. These items were again all highly correlated ($r > .89$); they were averaged to form a composite measure of *perceived employee demeanor*.

RESULTS

According to our hypotheses, being in a positive mood should promote more positive interpersonal behaviors and more helping, but these mood effects should be reduced for experienced long-term workers who are more likely to rely on routine, direct access responses that require no on-line processing and are thus impervious to mood congruence effects.

Behavioral helpfulness was analyzed in a 3 (mood: positive, neutral, negative) $\times$ 2 (experience: low, high) ANOVA. Results showed a highly significant mood main effect, $F(2, 54) = 7.43$, $p < .01$, $\eta_p^2 = .19$ and a significant experience $\times$ mood interaction, $F(2, 54) = 5.77$, $p < .01$, $\eta_p^2 = .16$. Less experienced workers helped significantly more in the positive ($M = 6.51$, $SD = .88$) than in the negative mood condition ($M = 4.08$; $SD = 1.06$), $F(1, 18) = 9.34$, $p < .001$, $\eta_p^2 = .22$. Positive mood also produced significantly more helping in this group than in the neutral condition ($M = 4.63$; $SD = 1.13$; $F(1, 18) = .4.72$, $p < .05$; $\eta_p^2 = .13$). Helping was not significantly different between the control and the negative mood group for less experienced workers. In contrast, mood had no influence on helping behaviors by highly experienced workers who helped at a similar rate in the positive ($M = 5.24$, $SD = 1.25$), neutral ($M = 4.77$; $SD = .98$) and negative mood conditions ($M = 4.93$, $SD = .96$), $F(1, 18) = .18$, *ns* (see Figure 1).

Subjective ratings of employee demeanor on the four combined scales showed no significant experience $\times$ mood interaction, $F(2, 54) = 3.14$, *ns*. However, a similar pattern of simple effects emerged; the demeanor of less experienced workers was rated significantly more favorably in the positive ($M = 5.70$, $SD = .40$) than in the neutral ($M = 4.66$; $SD = .57$), $F(1, 18) = 4.23$, $p < .05$, $\eta_p^2 = .11$, or in the negative mood condition ($M = 4.32$, $SD = .45$), $F(1, 18) = 5.27$, $p < .03$, $\eta_p^2 = .19$. The demeanor of more experienced workers did not differ between the positive ($M = 4.75$, $SD = .54$), neutral ($M = 4.89$, $SD = .69$) and negative mood conditions ($M = 5.0$, $SD = .97$), $F(1, 18) < .48$, *ns* (see Figure 2).

DISCUSSION

These results demonstrate for the first time in a real-life retail setting that the influence of transient moods on interpersonal behaviors and the quality of customer service responses is moderated by the employee's level of expertise. As specifically predicted by theories such as the AIM (Forgas, 1995, 2002), less experienced sales staff showed significant mood congruity in their behaviors. More
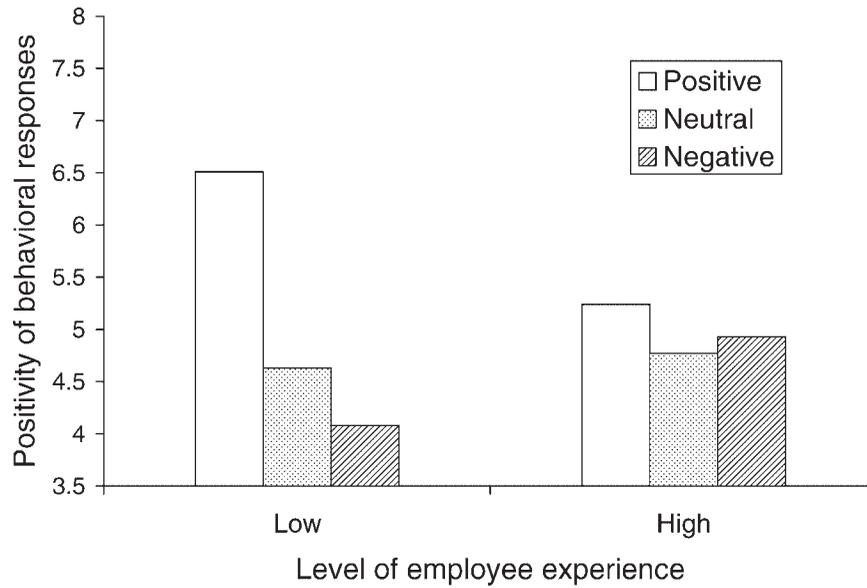
Figure 1.   The effects of mood and level of employee experience (low, high) on the positivity of behavioral responses to a customer request
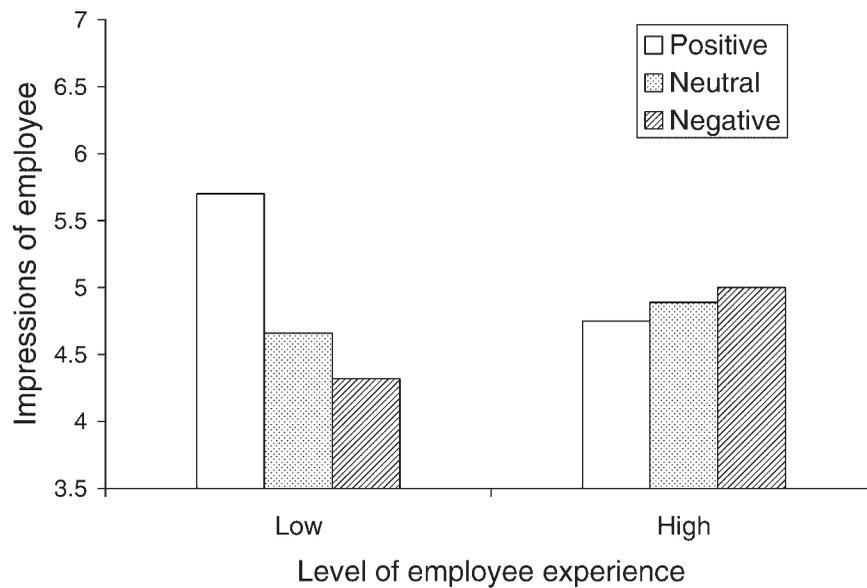

Figure 2.   The effects of mood and level of employee experience on the overall subjective impressions formed of department store staff by confederates blind to the mood induction (composite of four rating scales: *courtesy, politeness, friendliness*, and *responsiveness)*

experienced staff who were likely to have developed a rich repertoire of routine, direct access customer service responses were not influenced by our temporary mood induction. These findings have several interesting implications for current affect-cognition theorizing and for our understanding of mood effects on interpersonal behaviors in general, and customer service delivery in particular.

Theoretical Implications

This study extends previous laboratory research on affective influences on interpersonal behaviors (Forgas, 2002) to the new, real-life domain of customer service delivery. Affect is still a poorly understood influence on many workplace behaviors (Forgas & George, 2002; Forgas & Locke, 2005; George & Jones, 1997). Delivering customer assistance in response to a difficult, open-ended request is a sensitive measure of customer service orientation. Although given its field setting this experiment was not suitable for obtaining precise evidence about mediating mechanisms such as processing strategies, the findings are consistent with the theoretical predictions derived from the AIM (Forgas, 1995, 2002) and represent the first unobtrusive field experiment to support the predicted process specificity of affect congruence in naturalistic behaviors. Extrapolating from past laboratory research, more positive and helpful responses are consistent with the selective priming and availability of memory-based information used to construct an appropriate response (Forgas, 1999, 2002). Indeed, it is just these kinds of constructive, indeterminate social tasks studied here that are most likely to call for open, constructive processing that is particularly subject to mood-congruent biases (Forgas, 1995, 1999; Sedikides, 1995).

The AIM specifically predicts that constructive processing is a necessary prerequisite for affect infusion to occur. When people can employ a routine, direct access process to produce a response, no constructive thinking is required and so affect priming is unlikely to influence the response. In our case, highly experienced employees are more likely to possess a rich repertoire of well-rehearsed responses to customer requests and so they need not engage in constructive, memory-based processing in deciding how to respond. Reactions based on such well-rehearsed response strategies–*direct access* processing in terms of the AIM–should be impervious to mood priming effects, as was indeed found here. This interpretation is also supported by complementary laboratory evidence suggesting mood effects are reduced for routine actions that call for little constructive processing (Fiedler, 2001; Forgas, 2002; Forgas & Locke, 2005; Sedikides, 1995). Seen in this context, our results make a significant contribution to the literature by extending theoretical predictions derived from recent affect-cognition research to the real-life domain of customer service delivery.

Before accepting this interpretation, however, we also need to consider a number of possible alternative mechanisms. As older people are less likely to be mood sensitive (Mather et al., 2004), it is also possible that age differences between more and less experienced employees may have influenced our results. We checked this possibility but found no evidence for any correlation between age and self-reported mood, $r = .06$, *ns*. Further, we also repeated the main analyses with employee age included as a covariate, but the pattern of results remained unchanged. Thus, chronological age was not a confounding influence on these results.

Alternatively, could it be that more experienced employees who were more accustomed to receiving both positive and negative customer comments were simply less influenced by the mood induction? This again seems most unlikely, as the pilot study found that the mood induction was in fact equally effective for short- and long-term employees. Another possibility is that differential responses by short- and long-term employees may partly reflect the different levels of supervision they are subjected to. However, this was not the case here as none of the employees were under direct supervision during the study and they were all at a comparable level in the job hierarchy irrespective of their length of employment.

Another issue that may have influenced our results is the possibility of personality differences between shorter and longer term employees. If longer term employees are more frustrated, resentful, stuck in their ways and generally unmotivated; this may partly account for the observed differences. To eliminate this possibility, we administered the 10-item short version of the Big 5 personality inventory (TIPI; Gosling, Rentfrow, & Swann, 2003) to a sub-sample of 20 short- and long-term employees in the neutral mood condition immediately after the mood validation ratings were collected. An analysis of

their responses found no significant differences between their scores on the five personality dimensions assessed. The absence of underlying, enduring personality differences between the two groups of employees is also confirmed when we compare the baseline helpfulness scores of those assigned to the neutral group condition: average helpfulness in this group was essentially the same in the short- and the long-term group.

Alternative theories of mood congruence, such as the affect-as-information model predict that people may rely on their prevailing mood as a heuristic cue to infer the appropriate response. However, this is an unlikely explanation here, as the simple reliance on the affect-as-information heuristic cannot explain the kind of prolonged, complex, and strategic behavioral differences we observed here. Also, the affect-as-information account offers no plausible explanation as to why level of experience should have moderated mood effects. In conclusion, the results obtained here are highly consistent with the predictions of the AIM and support prior laboratory studies showing the process dependence of mood congruence in laboratory settings.

These findings may have some interesting implications for research on mood effects on helping. Past studies show that positive affect can promote helping, but only if the task is not costly or demanding (Carlson & Miller, 1987) and if helping can contribute to positive feelings as a form of self-regulation (Clark & Isen, 1982; Salovey et al., 1991). Our results suggest that positive mood is more likely to promote helping due to mood-congruence effects in situations that recruit constructive processing as is the case with less experienced staff in customer service encounters. It is interesting that these mood effects were observed even where helping was role prescribed and the task involved a degree of real cost and effort. In contrast, negative moods produced no influence on helping in this role-governed context, as helping is unlikely to be a relevant source of affect repair in this context (e.g. Cialdini & Fultz, 1990).

Practical Implications

Positive interpersonal behavior in general and customer service behaviors in particular are of crucial importance in organizations. Our findings confirm that positive mood often has a beneficial effect on interpersonal behaviors and work performance (Carlson et al., 1988; Forgas, 2002; George, 1998; Salovey et al., 1991; Wright & Staw, 1998). However, these effects are likely to be moderated by contextual factors, for example, by employee experience as was the case here. Less experienced staff may need to engage in more open and constructive processing and thus should show greater mood congruence, whereas experienced staff can rely on routine responses that are less influenced by mood, as predicted by the AIM (Forgas, 1999, 2002). Our results suggest that fairly mild positive mood inducers such as receiving rewarding feedback, or perhaps listening to music, may well improve service quality by some customer service staff (George, 1998). Further, the deleterious effects of staff dysphoria may be reduced by channeling critical customer complaints away from direct sales staff. These results could also be helpful in refining the concept of 'affective intelligence' in organizations (Ciarrochi, Forgas, & Mayer, 2006). Becoming aware of these subtle mood effects on customer service behaviors may be a potentially important skill that could be part of the training provided to novice employees.

Limitations and Future Directions

There are also some obvious limitations to these results. In addition to staff experience, future research may explore the role of additional factors such as work motivation, training and affective intelligence in moderating mood effects on service delivery (Ciarrochi et al., 2006; Forgas, 1999). To the extent that

our results were consistent across a number of dependent measures, were obtained in a real-life setting, and are consistent with existing affect-cognition theories, we can be reasonably confident about the reliability of our findings. The mood induction we used, positive or negative feedback, is one of the most common and reliable mood induction methods used in the experimental and the applied literature (Forgas, 2002). In addition to exploring mood effects, future studies may also look at the consequences of specific emotions, such as fear, disgust, and anger on customer service behaviors (e.g., Lerner & Keltner, 2001). We know, for example, that fear and disgust are associated with avoidant behaviors. The specific behavioral tendencies associated with these emotions may be a promising topic for future investigations in field settings.

Despite recent advances in affect research, we still know relatively little about how feelings impact on real-life workplace behaviors such as customer service delivery. The present study extends recent research on affect and social cognition (Bower, 1991; Fiedler, 2001; Fiedler & Bless, 2001; Forgas, 1995, 2002) to the domain of customer service delivery and shows that negative mood can impair and positive mood improve customer service responses but only by less experienced employees, as predicted by the AIM. The mood effects observed here suggest that further research on affective influences on workplace behaviors should be of considerable theoretical as well as applied interest.

ACKNOWLEDGEMENTS

REFERENCES

Bless, H. (2001). Mood and the use of general knowledge structures. In L. L. Martin (Ed.), *Theories of mood and cognition: A user's guidebook* (pp. 9–26). Mahwah, NJ: Lawrence Erlbaum Associates.

Bless, H., & Fiedler, K. (2006). Mood and the regulation of information processing and behaviour. In J. P. Forgas (Ed.), *Affect in social thinking and behaviour* (pp. 65–84). New York: Psychology Press.

Bohner, G., & Waenke, M. (2003). *Attitudes and attitude change*. New York: Psychology Press.

Bower, G. H. (1991). Mood congruity of social judgments. In J. P. Forgas (Ed.), *Emotion and Social Judgments* (pp. 31–53). New York: Pergamon Press.

Carlson, M., Charlin, V., & Miller, N. (1988). Positive mood and helping behavior: A test of six hypotheses. *Journal of Personality and Social Psychology*, *55*, 211–229.

Cialdini, R. B., & Fultz, J. (1990). Interpreting the negative mood-helping literature via 'mega'-analysis: A contrary view. *Psychological Bulletin*, *107*, 210–214.

Ciarrochi, J. V., Forgas, J. P., & Mayer, J. D. (Eds.). (2006). *Emotional intelligence in everyday life* (2nd ed.). New York: Psychology Press.

Clark, M. S., & Isen, A. M. (1982). Toward understanding the relationship between feelings states and social behavior. In A. H. Hastorf, & A. M. Isen (Eds.), *Cognitive social psychology* (pp. 73–108). New York: Elsevier Science.

Fiedler, K. (2001). Affective influences on social information processing. In J. P. Forgas (Ed.), *Handbook of affect and social cognition* (pp. 163–185). New Jersey: Lawrence Erlbaum Associates.

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. (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. (1999). On feeling good and being rude: Affective influences on language use and request formulations. *Journal of Personality and Social Psychology*, *76*, 928–939.

Forgas, J. P. (2002). Feeling and doing: Affective influences on interpersonal behavior. *Psychological Inquiry*, *13*, 1–28.

Forgas, J. P., & George, J. M. (2002). Affective influences on judgments and behavior in organizations: An information processing perspective. *Organizational Behavior and Human Decision Processes*, *86*, 3–34.

Forgas, J. P., & Locke, J. (2005). Affective influences on causal inferences: The effects of mood on attributions for positive and negative interpersonal episodes. *Cognition and Emotion*, *19*, 1071–1081.

George, J. M. (1998). Salesperson mood at work: Implications for helping customers. *Journal of Personal Selling and Sales Management*, *18*, 23–31.

George, J. M., & Bettenhausen, K. (1990). Understanding prosocial behaviour, sales performance, and turnover: A group-level analysis in a service context. *Journal of Applied Psychology*, *75*, 698–709.

George, J. M., & Jones, G. R. (1997). Experiencing work: Values, attitudes, and moods. *Human Relations*, *30*, 393–416.

Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the big five personality domains. *Journal of Research in Personality*, *37*, 504–528.

Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality & Social Psychology*, *81*, 146–159.

Mather, M., Canli, T., English, T., Whitfield, S., Wais, P., Ochsner, K., et al. (2004). Amygdala responses to emotionally valenced stimuli in older and younger adults. *Psychological Science*, *15*, 2590263.

Salovey, P., Mayer, J. D., & Rosenhan, D. L. (1991). Mood and helping: Mood as a motivator of helping and helping as a regulator of mood. In M. S. Clark (Ed.), *Prosocial behaviour* (pp. 215–237). Newbury Park: Sage Publications.

Sedikides, C. (1995). Central and peripheral self-conceptions are differentially influenced by mood: Tests of the differential sensitivity hypothesis. *Journal of Personality & Social Psychology*, *69*, 759–777.

Wright, T. A., Cropanzano, R., & Meyer, D. G. (2004). State and trait correlates of job performance: A tale of two perspectives. *Journal of Business and Psychology*, *18*, 365–383.

Wright, T. A., & Staw, B. M. (1998). Affect and favorable work outcomes: Two longitudinal tests of the happy-productive worker thesis. *Journal of Organizational Behaviour*, *20*, 1–23.