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The current findings can inform different situations in social and work life. For example, the current findings can be considered as relevant for actual business settings, in which teams have to decide about competing business strategies. Although firms are most likely to be successful when they adopt a management strategy in which ethical business conduct and performance goals converge (Carroll & Shabana, 2010), ethical considerations cannot always be reconciled with the pursuit of business success. Other factors—such as profit orientation, the financial capacities of an organization, or legal concerns—tend to limit the opportunity to always engage in moral initiatives (Barraquier, 2011). Managers are therefore frequently confronted with a complex trade-off

between financial and nonfinancial business objectives that represent competing demands, in which valid arguments are available that justify both objectives (Clegg et al., 2007; Hahn et al., 2010; Margolis & Walsh, 2003; Vogel, 2005). Trade-offs between moral values and the need to preserve group performance can also be observed in other contexts. For example, previous research has demonstrated that supporters of political parties were willing to tolerate and support potential leaders who deviated from their in-group norm if these candidates were believed to increase the likelihood of electoral success (Morton, Postmes, & Jetten, 2007). These findings underline the more general relevance of strategic concerns in group decision-making when task performance could suffer from an exclusive focus on normative considerations alone.

### *Limitations and Future Directions*

A limitation of the current research is that the sample size (in particular the number of participants whose cardiovascular responses were suitable for analyses) was relatively small. Although the effects of morality and competence on cardiovascular responses were assessed across multiple measurement moments as a within-subjects factor—which in turn increases statistical power and reduces error variance (Greenwald, 1976)—the robustness of the cardiovascular findings would nevertheless require replication in future studies with a larger sample.

An additional limitation of the current research is that the laboratory setting required us to employ a decision-making procedure that primarily addressed the initial stages of team collaboration, in which team members did not have the opportunity to interact with other team members and could only form an impression about the team through the self-descriptions provided by their team members. In principle, the impact of such statements about the value attached to morality and competence might diminish during later stages of team collaboration due to, for example, actual behavior displayed or the development of specific group norms. Nevertheless,

we argue that our focus on a priori impressions is merited: Initial impressions have been shown to influence a range of affective and behavioral responses (Brambilla, Rusconi, Sacchi, & Cherubini, 2011; Brambilla et al., 2013; Ellemers et al., 2013), which in turn can influence the decision-making process.

It can be argued that the stakes of negotiating about competing strategies in decision-making procedures are higher in real-life situations than in experimental task teams. For example, research has indicated that experiencing financial insecurity can alter people's moral integrity, such that they are more willing to cheat for financial gain and are more tolerant toward immoral behavior for financial gain of others (Sharma, Mazar, Alter, & Ariely, 2014). In the current research there were no salient negative outcomes attached to primarily pursuing normative objectives during the decision-making process, which might have influenced the attractiveness of teams that value morality over competence. Future research could therefore explore whether the attractiveness of moral teams is attenuated in contexts that are less balanced, because strategic decisions lead to more benefits for the team than normative decisions.

With this research we have established that—when both types of concerns are required—an imbalance in the importance attached to competence and morality in a task team is more likely to elicit threat than balanced preferences. Future research might further examine how this relates to team members' perceptions of their ability to convince others of their self-preferred views, or the confidence they have that different aspects relevant to the task will be duly considered. In addition, while the current research focused on the anticipation of collaborating with others who prioritize competence over morality or vice versa in contexts where both features are important, future research might address how these collaborations actually unfold. For instance, it could be examined how people might adapt their post hoc rationalizations of group decisions to the stated concerns of other group members. When competence concerns dominate moral concerns in decision-making, people can rationalize their

pragmatic and utilitarian approach to the decision-making by invoking moral justifications for their behavior after the fact. This is thought to help them maintain their moral self-view, and reconcile the conviction that morality is important to them with outward displays of behavior that do not seem to attest to this (see also Detert, Treviño, & Sweitzer, 2008 and Tetlock, 2003). Future research might address how people use such post hoc motivated moral reasoning to resolve a trade-off between normative and strategic concerns in ambiguous decision-making contexts, and whether the awareness that they may do so could influence their response to an imbalance between morality and competence levels of their team members.

### Conclusion

The added value of the present research beyond prior work on morality and competence in decision-making teams is that we established a discrepancy between self-reported ratings of team *attractiveness* (in which perceptions of the team's *morality* were decisive) and physiological responses during task *engagement* (revealing the importance of meeting situational demands by *balancing* both types of concerns in decision dilemmas). We think our observation that when both types of concerns are required, congruent levels of team morality and team competence promoted a more adaptive motivational state than incongruent team features is particularly noteworthy. Thus, our results show that high team morality can elicit a physiological threat response during task performance when the team attaches less value to competence as a relevant task requirement. Nevertheless, our findings also indicate that morality still functions as the primary determinant of people's feelings of attraction and commitment to the team. As a result—when there is an imbalance between task-relevant concerns in the team—people may still be willing to engage with other team members in addressing the increased situational demands imposed by this imbalance when they are attracted and committed to the team because of the high value attached to

morality. By contrast, they are less likely to remain committed to a team that represents a source of threat when it values competence over morality.

In sum, the current research offers new insights into the effects of different team climates on task engagement. Even though people only seem to pay attention to the morality of teams when they anticipate how inclusion in the team could influence their self-views, the interplay between competence and morality determines people's motivational states when actually working with others to resolve complex decision-making dilemmas.

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### Notes

1. Additional self-report measures were assessed that are not reported in this manuscript. A principal component analysis (PCA) revealed that the additional measures were not distinct from the team attractiveness, identification, and team commitment measures. We therefore decided to exclude these measures from the analyses.
2. A PCA was conducted to examine the distinctiveness of the self-report measures. Initial results showed that team attractiveness and identification items clustered together, but were distinct from the team commitment items. An additional PCA—in which we extracted two factors to tease apart the team attractiveness from the identification items—revealed that these measures formed two separate clusters, as intended. Team attractiveness and identification are sometimes considered together as evaluative (liking) versus cognitive (inclusion) aspects of the relation between the self and the group. This might account for the high correlation between these measures. However, team attractiveness is focused on how individuals judge others in a team, whereas identification is focused on whether team features are considered as a relevant part of the self. Thus, despite the high correlation between the team attractiveness and identification measures, we decided to treat these as two distinct constructs for statistical and conceptual reasons.
3. No differences between conditions in baseline measures emerged,  $F < 1.25, p > .30$ .
4. Across the 16 cardiovascular measures (HR, PEP, CO, and TPR during the four measuring moments: baseline period and the three webcam recordings) data were transformed in eight cases.
5. Sixteen participants were excluded from the cardiovascular analyses because of poor signal quality during the ICG and ECG recordings, and five additional participants were excluded because of blood pressure equipment malfunctioning. Consequently, cardiac performance measures (i.e., HR, PEP, and CO) were analyzed for 60 participants, and the blood pressure measure (i.e., TPR) was analyzed for 55 participants, explaining differences in degrees of freedom reported.
6. Additional repeated-measures ANOVAs were conducted in which the participants' morality and competence scores were included as covariates. The interaction effects between morality and competence on CO, TPR, and TCI remained significant, which indicates that cardiovascular responses appear to be driven by a preference for balance in team features rather than by individual differences in preferences for these concerns.

### References

- Acqknowledge (Version 3.8.2) [Computer software]. Goleta, CA: Biopac.
- Barraquier, A. (2011). Ethical behaviour in practice: Decision outcomes and strategic implications. *British Journal of Management*, 22, 28–46. doi:10.1111/j.1467-8551.2010.00726.x
- Bettencourt, B. A., Dorr, N., Charlton, K., & Hume, D. L. (2001). Status differences and in-group bias: A meta-analytic examination of the effects of status stability, status legitimacy, and group permeability. *Psychological Bulletin*, 127, 520–542. doi:10.1037//0033-2909.127.4.520
- Bishop, J. W., & Scott, K. D. (2000). An examination of organizational and team commitment in a self-directed team environment. *Journal of Applied Psychology*, 85, 439–450. doi:10.1037/0021-9010.85.3.439
- Blascovich, J. (2008). Challenge, threat, and health. In J. Y. Shah & W. L. Gardner (Eds.), *Handbook of motivation science* (pp. 481–493). New York, NY: Guilford Press.
- Blascovich, J., & Mendes, W. B. (2000). Challenge and threat appraisals: The role of affective cues. In J. P. Forgas (Ed.), *Feeling and thinking: The role of*

- affect in social cognition (pp. 59–82). Cambridge, UK: Cambridge University Press.
- Blascovich, J., Mendes, W. B., Hunter, S. B., & Salomon, K. (1999). Social “facilitation” as challenge and threat. *Journal of Personality and Social Psychology*, *77*, 68–77. doi:10.1037/0022-3514.77.1.68
- Blascovich, J., Seery, M. D., Mugridge, C. A., Norris, R. K., & Weisbuch, M. (2004). Predicting athletic performance from cardiovascular indexes of challenge and threat. *Journal of Experimental Social Psychology*, *40*, 683–688. doi:10.1016/j.jesp.2003.10.007
- Blascovich, J., & Tomaka, J. (1996). The biopsychosocial model of arousal regulation. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 28, pp. 1–51). New York, NY: Academic Press.
- Brambilla, M., Rusconi, P., Sacchi, S., & Cherubini, P. (2011). Looking for honesty: The primary role of morality (vs. sociability and competence) in information gathering. *European Journal of Social Psychology*, *41*, 135–143. doi:10.1002/ejsp.744
- Brambilla, M., Sacchi, S., Pagliaro, S., & Ellemers, N. (2013). Morality and intergroup relations: Threats to safety and group image predict the desire to interact with outgroup and ingroup members. *Journal of Experimental Social Psychology*, *49*, 811–821. doi:10.1016/j.jesp.2013.04.005
- Brambilla, M., Sacchi, S., Rusconi, P., Cherubini, P., & Yzerbyt, V. (2012). You want to give a good impression? Be honest! Moral traits dominate group impression formation. *British Journal of Social Psychology*, *51*, 149–166. doi:10.1111/j.2044-8309.2010.02011.x
- Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Reviews*, *12*, 85–105. doi:10.1111/j.1468-2370.2009.00275.x
- Clegg, S., Kornberger, M., & Rhodes, C. (2007). Business ethics as practice. *British Journal of Management*, *18*, 107–122. doi:10.1111/j.1467-8551.2006.00493.x
- Detert, J. R., Treviño, L. K., & Sweitzer, V. L. (2008). Moral disengagement in ethical decision making: A study of antecedents and outcomes. *Journal of Applied Psychology*, *93*, 374–391. doi:10.1037/0021-9010.93.2.374
- De Wit, F. R., Scheepers, D., & Jehn, K. A. (2012). Cardiovascular reactivity and resistance to opposing viewpoints during intragroup conflict. *Psychophysiology*, *49*, 1523–1531. doi:10.1111/j.1469-8986.2012.01456.x
- Ditto, P. H., & Lopez, D. F. (1992). Motivated skepticism: Use of differential decision criteria for preferred and nonpreferred conclusions. *Journal of Personality and Social Psychology*, *63*, 568–584. doi:10.1037/0022-3514.63.4.568
- Ellemers, N., & Haslam, S. A. (2011). Social identity theory. In P. A. M. van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 379–398). London, UK: SAGE.
- Ellemers, N., Kingma, L., van de Burgt, J., & Barreto, M. (2011). Corporate social responsibility as a source of organizational morality, employee commitment and satisfaction. *Journal of Organizational Moral Psychology*, *1*, 97–124. Retrieved from [https://www.researchgate.net/publication/265440982\\_Corporate\\_Social\\_Responsibility\\_as\\_a\\_Source\\_of\\_Organizational\\_Morality\\_Employee\\_Commitment\\_and\\_Satisfaction](https://www.researchgate.net/publication/265440982_Corporate_Social_Responsibility_as_a_Source_of_Organizational_Morality_Employee_Commitment_and_Satisfaction)
- Ellemers, N., Pagliaro, S., & Barreto, M. (2013). Morality and behavioural regulation in groups: A social identity approach. *European Review of Social Psychology*, *24*, 160–193. doi:10.1080/10463283.2013.841490
- Ellemers, N., Pagliaro, S., Barreto, M., & Leach, C. W. (2008). Is it better to be moral than smart? The effects of morality and competence norms on the decision to work at group status improvement. *Journal of Personality and Social Psychology*, *95*, 1397–1410. doi:10.1037/a0012628
- Ellemers, N., Spears, R., & Doosje, B. (Eds.). (1999). *Social identity: Context, commitment, content*. Oxford, UK: Blackwell.
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Science*, *11*, 77–83. doi:10.1016/j.tics.2006.11.005
- Frings, D., Hurst, J., Cleveland, C., Blascovich, J., & Abrams, D. (2012). Challenge, threat, and subjective group dynamics: Reactions to normative and deviant group members. *Group Dynamics: Theory, Research, and Practice*, *16*, 105–121. doi:10.1037/a0027504
- Greenwald, A. G. (1976). Within-subjects designs: To use or not to use? *Psychological Bulletin*, *83*, 314–320. doi:10.1037/0033-2909.83.2.314
- Hahn, T., Figge, F., Pinkse, J., & Preuss, L. (2010). Trade-offs in corporate sustainability: You can't have your cake and eat it. *Business Strategy and the Environment*, *19*, 217–229. doi:10.1002/bse.674

- Haslam, S. A., & Ellemers, N. (2011). Identity processes in organizations. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (Vol. 1, pp. 715–744). New York, NY: Springer.
- Leach, C. W., Ellemers, N., & Barreto, M. (2007). Group virtue: The importance of morality (vs. competence and sociability) in the positive evaluation of in-groups. *Journal of Personality and Social Psychology, 93*, 234–249. doi:10.1037/0022-3514.93.2.234
- Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly, 48*, 268–305. doi:10.2307/3556659
- Morton, T. A., Postmes, T., & Jetten, J. (2007). Playing the game: When group success is more important than downgrading deviants. *European Journal of Social Psychology, 37*, 599–616. doi:10.1002/ejsp.385
- Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review, 84*, 231–259. doi:10.1037/0033-295X.84.3.231
- Rosnow, R. L., & Rosenthal, R. (2002). *Beginning behavioral research: A conceptual primer*. Upper Saddle River, NJ: Prentice-Hall.
- Seery, M. D. (2011). Challenge or threat? Cardiovascular indexes of resilience and vulnerability to potential stress in humans. *Neuroscience and Biobehavioral Reviews, 35*, 1603–1610. doi:10.1016/j.neubiorev.2011.03.003
- Seery, M. D., Weisbuch, M., Hetenyi, M. A., & Blascovich, J. (2010). Cardiovascular measures independently predict performance in a university course. *Psychophysiology, 47*, 535–539. doi:10.1111/j.1469-8986.2009.00945.x
- Sharma, E., Mazar, N., Alter, A. L., & Ariely, D. (2014). Financial deprivation selectively shifts moral standards and compromises moral decisions. *Organizational Behavior and Human Decision Processes, 123*, 90–100. doi:10.1016/l.obhdp.2013.09.001
- Tajfel, H. (1978). Interindividual behaviour and intergroup behaviour. In H. Tajfel (Ed.), *Differentiation between social groups: Studies in the social psychology of intergroup relations* (pp. 27–60). London, UK: Academic Press.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In M. A. Hogg & D. Abrams (Eds.), *Intergroup relations* (pp. 94–109). Philadelphia, PA: Psychology Press.
- Tetlock, P. E. (2003). Thinking the unthinkable: Sacred values and taboo cognitions. *Trends in Cognitive Sciences, 7*, 320–324. doi:10.1016/S1364-6613(03)00135-9
- Van Prooijen, A. M., & Ellemers, N. (2015). Does it pay to be moral? How indicators of morality and competence enhance organizational and work team attractiveness. *British Journal of Management, 26*, 225–236. doi:10.1111/1467-8551.12055
- Vogel, D. (2005). *The market for virtue: The potential and limits of corporate social responsibility*. Washington, DC: The Brookings Institution.
- VU-AMS (AMS-IMP, Version 1.3.8.4) [Computer software]. Amsterdam, the Netherlands: Free University.
- Weisbuch, M., Seery, M. D., Ambady, N., & Blascovich, J. (2009). On the correspondence between physiological and nonverbal responses: Nonverbal behavior accompanying challenge and threat. *Journal of Nonverbal Behavior, 33*, 141–148. doi:10.1007/s10919-008-0064-8