

Stereotype Threat Spillover:

Why Stereotype Threat is more useful for organizations than it seems.

Sonia K. Kang & Michael Inzlicht

**ARTICLE IN PRESS AT *INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY*:  
*PERSPECTIVES ON SCIENCE AND PRACTICE*.  
POSTED WITH PERMISSION FROM BLACKWELL PUBLISHING.\*\***

Sonia K. Kang; Institute for Management and Innovation, University of Toronto Mississauga;  
Rotman School of Management, University of Toronto; 105 St. George Street, Toronto,  
ON, Canada, M5S 3E6; 905.569.4712; sonia.kang@rotman.utoronto.ca

Michael Inzlicht; Department of Psychology, University of Toronto; Rotman School of  
Management, University of Toronto; 1265 Military Trail, Toronto, ON, Canada, M1C  
1A4; 416.208.4826; michael.inzlicht@utoronto.ca

The real question about stereotype threat's usefulness for organizational research and practice is not *if* it is important, but rather *how* important it is. As outlined in the focal article, stereotype threat is important within the organizational context (Kalokerinos, von Hippel, & Zacher, in press). Stereotype threat has negative intrapersonal effects (e.g., decreased job satisfaction and organizational commitment, altered professional identities), negative interpersonal effects (e.g., dismissal of useful feedback, adoption of undesirable interpersonal styles), and it interferes with the employee-organization relationship. Stereotype threat is powerful and pervasive, and has the potential to affect a large number and variety of employees over the course of their careers. Recent work on *stereotype threat spillover*, however, suggests that the magnitude of the stereotype threat effect has been underestimated, suggesting that its impact on organizations is much larger than currently thought (Inzlicht & Kang, 2010; Inzlicht, Tullett, Legault, & Kang, 2011). Further, the stereotype threat spillover model provides one possible explanation for the finding that performance is often unaffected by stereotype threat in field settings—an anomaly discussed in the focal article. In what follows, we describe stereotype threat spillover and use it to argue that understanding and combatting stereotype threat is an important goal for organizational scholars and practitioners.

Stereotype threat is the situational threat of confirming a negative stereotype about one's group, and most research on the topic has focussed on consequences of threat for task performance. In contrast, stereotype threat spillover goes beyond performance and is concerned with the process via which people cope with social identity threats. Stereotype threat spillover is a situational predicament whereby coping with negative stereotypes increases fatigue and directs motivational priorities away from tasks requiring effortful self-control (Inzlicht & Kang, 2010). Common coping strategies used to deal with stereotype threat (e.g., thought suppression, task

vigilance, emotion regulation) require self-control resources. The stereotype threat spillover model argues that this effortful coping leads to mental fatigue, decreasing motivation to control certain behaviors on subsequent tasks (see Inzlicht, Schmeichel, & Macrae, 2014). Because of this, the negative effects of stereotype threat can *spillover* into any domain where self-control is required, regardless of whether or not the domain is related to the initial impugning stereotype.

In our original investigation of stereotype threat spillover, we demonstrated the effect in four unique domains: aggression, eating, decision-making, and attention (Inzlicht & Kang, 2010). In our first two studies, women who experienced math-related stereotype threat responded with more aggression on a subsequent interpersonal task and ate more ice cream during a subsequent eating task than women who experienced the same threat but reappraised the situation as emotionally-neutral in order to cope in a way that is less fatiguing. Importantly, this aggression was measured after participants received negative performance feedback, an experience which would carry much significance in the workplace. Next, we found that recalling a threat to a wide variety of social identities (e.g., religion, race, gender), led participants to choose the higher-risk, lower-expected value choice in a decision-making task. Finally, we measured self-control directly and found that, compared to women in a reappraisal condition and men, stereotype-threatened women performed worse on an attentional control task and showed neural signals of inefficient performance monitoring. In each case, coping with stereotype threat “naturally” (e.g., via fatiguing or “resource-intensive” strategies, including thought/emotion suppression or excessive self-monitoring) required self-control and was effortful and demanding, interfering with the ability to do well in other areas where self-control was required (even though performance was maintained in the initial domain—a point we will return to later).

Of course, many—if not all—workplace tasks require some engagement of self-control, highlighting the large risk of stereotype threat spillover in this context. Using only the four examples described above, we can think of a number of ways in which stereotype threat spillover might impact organizational outcomes, in ways seemingly unrelated to an initial stereotype encounter. In our examples, we will focus on Paul, a 60-year-old man who works in the IT sector and commonly experiences age-related stereotype threat, a pervasive form of stereotype threat (Chasteen, Kang, & Remedios, 2011; although these examples apply across the broad range of social identity threats). Paul is the only older adult in his workgroup, is aware of negative stereotypes suggesting that older adults are less skilled and have less potential compared to their younger counterparts in the IT domain, and frequently overhears his coworkers making ageist comments and jokes about elderly customers. Paul's workplace may be pleasant and benign on the surface, but the threat of ageism constantly hangs in the air, and is something with which he must cope. Paul may cope by using effortful and “resource-intensive” coping strategies such as actively suppressing his negative thoughts and feelings or vigilantly monitoring his performance and self-presentation (e.g., Schmader, Johns, & Forbes, 2008). This type of coping will lead to mental fatigue, opening the door for stereotype threat spillover.

Our findings related to aggression suggest that coping with threats to his social identity could spillover and lead Paul into experiences of interpersonal conflict. Because this coping is mentally draining, Paul may be defensive or dismissive when given negative feedback, impatient with customers, or less likely to engage in organizational citizenship behaviors like helping a new co-worker understand a software system. Our findings related to eating and decision-making have implications for any number of outcomes associated with impulse control. Coping with stereotype threat could lead Paul to overeat, indulge in unhealthy foods, or abuse alcohol, any of

which would have negative implications for his overall health, and potentially lead to lost productivity and absenteeism. Other impulses that require self-control to avoid, including stealing office stationery or kitchen supplies, or surfing the internet on company time, may also become harder to resist. Finally, our results suggest that Paul's ability to focus on the appropriate information (i.e., his job-related tasks, duties, and responsibilities) will be impaired. Together, these examples highlight the myriad of consequences that can emanate from just one type of stereotype threat. Again, it is not stereotype threat per se causing these effects, but rather the subsequent self-control changes that result from having to cope with the threat.

While all of these spillover effects are occurring, Paul's performance on his central work tasks may not be directly affected. As discussed in the focal article, field examinations of stereotype threat often fail to replicate the negative effects on performance so commonly demonstrated in laboratory settings. Just like the participants in these field studies, Paul may be able to maintain high performance—but at what cost? In line with other work examining anxiety and attentional control (e.g., Eysenck & Calvo, 1992; Eysenck & Derakshan, 2011; Eysenck, Derakshan, Santos, & Calvo, 2007), our work on stereotype threat spillover demonstrates and helps to explain how performance can be maintained in the face of stereotype threat. In two of our studies, those examining aggression and attentional control, we measured women's math performance—performance in the stereotyped domain in question (Inzlicht & Kang, 2010). In both cases, stereotype threatened women showed no decrements in math performance. What we did find, however, was evidence consistent with the notion that these women had to *work harder* to preserve performance. In the aggression study, better math performance in the stereotype threat condition was associated with more subsequent aggression: the more effort women expended on the math task, the less restrained their subsequent behavior. Likewise, in the

attentional control study, better math performance in the stereotype threat condition was associated with overactive (i.e., inefficient) performance-monitoring, again suggesting poorer regulation of subsequent behavior.

As these studies demonstrate, stereotype threat impairs processing efficiency more so than it impairs performance effectiveness, reflecting a central tenet of attentional control theory (Eysenck et al., 2007; Eysenck & Derakshan, 2011). According to attentional control theory, when individuals who are stressed and anxious are highly motivated to succeed, they can engage effortful compensatory strategies to maintain performance. Unfortunately, this compensatory engagement is costly, shifting one's motivational priorities away from tasks requiring further effort. The examination of stereotype threat effects outside of the laboratory may thus be limited by the focus on performance outcomes. Although the heightened motivation of employees in the field may dampen the direct effects of stereotype threat on performance, the negative consequences of the threatening experience are likely to have spilled over into other domains where self-control is required. Coping with stereotype threat is taxing, and even if individuals do manage to maintain performance, this does not mean that they are immune to its negative effects.

The fact that stereotype threat can spill over between domains highlights the possibility that such threats could spill over to the broader domains of "work" and "life". As described above, although employees working in stereotype-threatening environments can maintain high performance, it is likely that this high performance is exacting a cost in some other area. It is important for organizations to think about how workplace stereotype threat might spill over into employees' home lives. Going back to our example of Paul, coping with workplace ageism all day may negatively impact his relationship with his wife, or his ability to keep up with his daily exercise routine. Each of these outcomes has negative consequences for Paul's overall health and

well-being, which may grow over time into deleterious organizational consequences (e.g., sick days, medical/stress leave, lowered job satisfaction, etc.). In the other direction, employees who deal with stereotype threat outside of work may be so mentally fatigued that they have trouble regulating their behaviors during their work lives. For example, an overweight homemaker who has to cope with weight stigma in all contexts outside of work may experience stereotype threat spillover into her work tasks, even though her co-workers and clients never observe her physical appearance. Therefore, it is important to consider the bidirectional influence of work/life stereotype threat spillover, and to help employees cope more effectively with stereotype threat, no matter the originating domain. For example, our work suggests that a simple cognitive reappraisal intervention helps to quell stereotype threat spillover effects (Inzlicht & Kang, 2010). Many different interventions for coping with stereotype threat have been examined, and it is possible to tailor these interventions to an organization's specific needs (see Cohen, Purdie-Vaughns, & Garcia, 2012 and Shapiro, Williams, & Hambarchyan, 2013 for reviews).

Stereotype threat effects are far-reaching, and have the potential to spill over onto any domain that requires self-control. Because work life is replete with tasks and interactions that require self-control, the importance of stereotype threat and stereotype threat spillover for organizations should not be underestimated. Stereotype threat spillover helps to explain how stereotype threat can impact individuals in ways that go far beyond performance outcomes. Further, by identifying effortful coping as a crucial mechanism, this work pinpoints a useful focus for interventions aimed at reducing the impact of stereotype threat. We echo the call made by the authors of the focal article for further research and discussion on stereotype threat in the workplace, and are hopeful that this research will help employees and organizations alike to harness their full potential.

## References

- Chasteen, A. L., Kang, S. K., & Remedios, J. D. (2012). Aging and stereotype threat: Development, process, and interventions. In M. Inzlicht & T. Schmader (Eds.), *Stereotype Threat: Theory, Process, and Application* (pp. 202-216). New York, NY: Oxford University Press.
- Cohen, G. L., Purdie-Vaughns, V. & Garcia, J. (2012). An identity threat perspective on intervention. In M. Inzlicht & T. Schmader (Eds.), *Stereotype threat: Theory, process, and application* (pp. 280-296). New York, NY: Oxford University Press.
- Eysenck, M. W., & Calvo, M. G. (1992). Anxiety and performance: The processing efficiency theory. *Cognition & Emotion*, *6*, 409–434.
- Eysenck, M. W., & Derakshan, N. (2011). New perspectives in attentional control theory. *Personality and Individual Differences*, *50*, 955-960.
- Eysenck, M. W., Derakshan, N., Santos, R., & Calvo, M. G. (2007). Anxiety and cognitive performance: Attentional control theory. *Emotion*, *7*, 336-353.
- Inzlicht, M., & Kang, S. K. (2010). Stereotype threat spillover: How coping with threats to social identity affects aggression, eating, decision making, and attention. *Journal of Personality and Social Psychology*, *99*, 467-481.
- Inzlicht, M., Tullett, A. M., Legault, L., & Kang, S. K. (2011). Lingering effects: Stereotype threat hurts more than you think. *Social Issues and Policy Review*, *5*, 227-256.
- Inzlicht, M., Schmeichel, B. J., & Macrae, C. N. (2014). Why self-control seems (but may not be) limited. *Trends in Cognitive Sciences*, *18*, 127-133. doi:10.1016/j.tics.2013.12.009



- Kalokerinos, E. K., von Hippel, C., & Zacher, H. (in press). Is stereotype threat a useful construct for organizational psychology research and practice? *Industrial and Organizational Psychology: Perspectives on Science and Practice*.
- Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype threat effects on performance. *Psychological Review*, *115*, 336-356.
- Shapiro, J. R., Williams, A. M., & Hambarchyan, M. (2013). Are all interventions created equal? A multi-threat approach to tailoring stereotype threat interventions. *Journal of Personality and Social Psychology*, *104*, 277-288.