Combining mastery learning techniques with psychological safety practices improved students' teamwork skills and comfort levels

A Multimodal Approach to Enhancing Cognitive and Affective Teamwork Domains: Integrating Psychological Safety and Mastery Learning in Business Writing Instruction

👤 **Dacia (Day-sha) Charlesworth, Communication & Professional Skills,** Kelley School of Business

Background:

Psychological safety in teams influenced by:
- Positive leadership, work design, team climate (Frazier et al., 2017)
- Mutual respect, care, shared input (McKinsey & Company, 2021)

Rationale:

Students with thorough understanding of course concepts may (1) Feel more confident in team settings and (2) Contribute more effectively to team projects (Table 1)
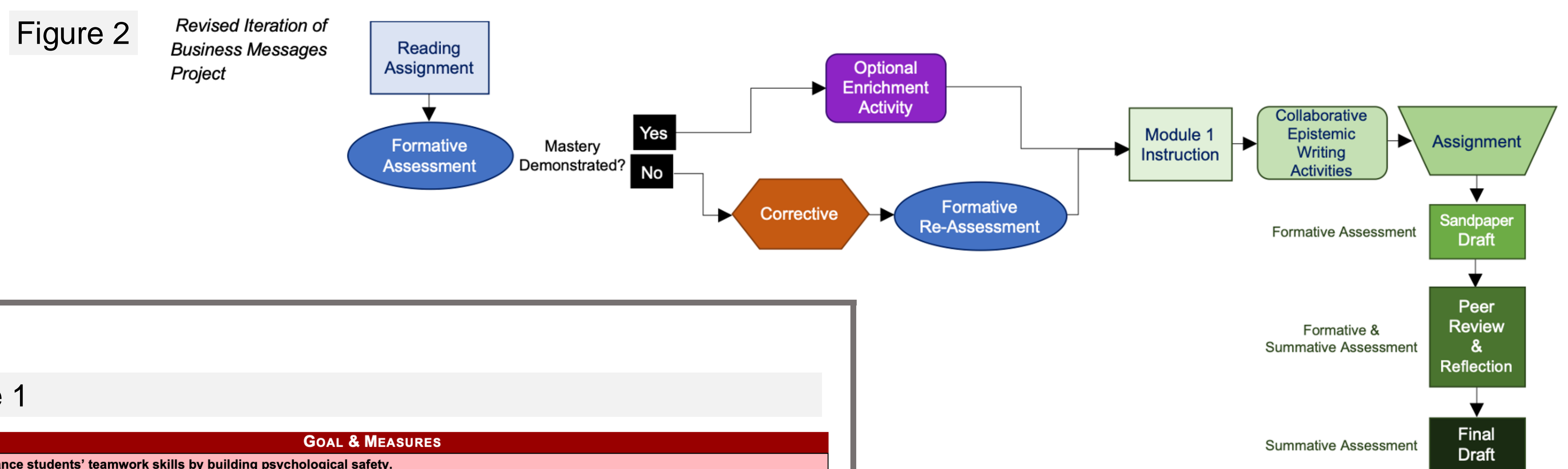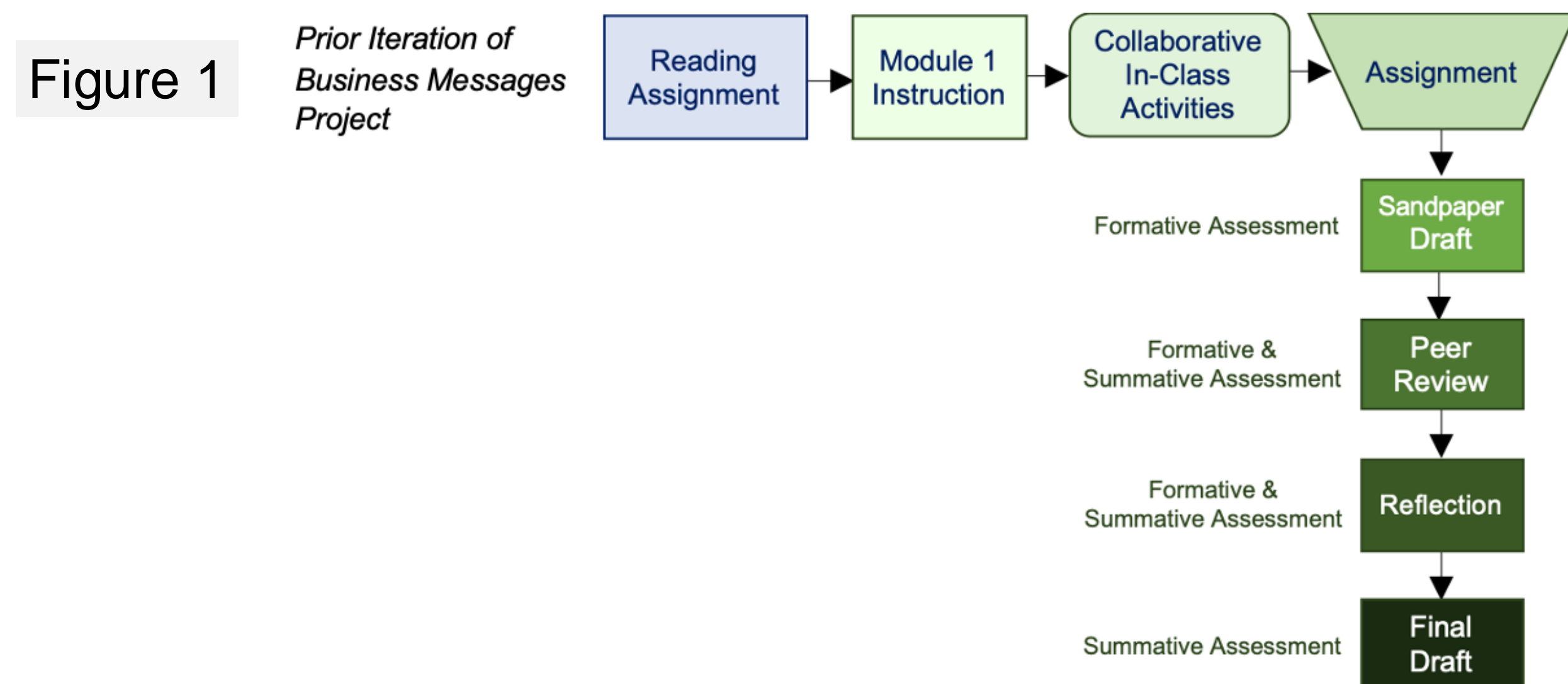
Research Question:
- Can mastery learning enhance psychological safety in team settings?

Methods:
- Course Structure: • 200-level required business writing course • Business Messages Project (31% of grade) • Focus on individual skills, then teamwork (Figure 1)
- Mastery Learning Approach: Implemented to enhance psychological safety • Emphasis on thorough understanding of course concepts • Complete low-stakes pre-class quizzes • Participate in collaborative in-class activities • Reflect on past team experiences (Figure 2)
- Pre- and post-test to measure psychological safety (Week 1 and 15, n=70)
- Teamwork assessment (n=70)

Findings:
- Teamwork Cognitive Assessment:
  - Excellent: 42.9%
  - Satisfactory: 40.0%
  - Unsatisfactory: 17.1%
- Formative assessments increased classroom psychological safety (Figure 3)
- Emphasizing "failing forward" improved student collaboration
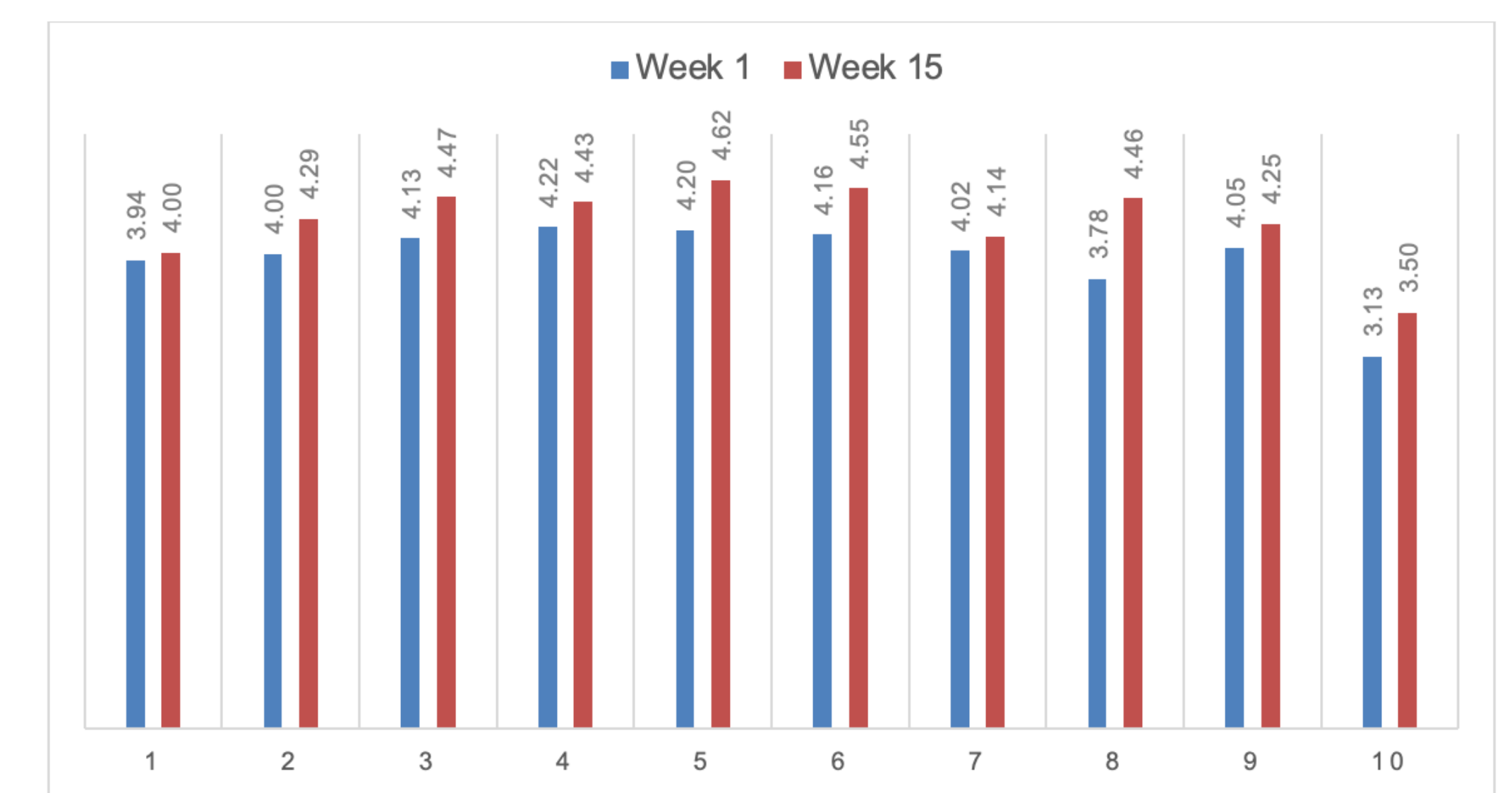- High quiz scores (90.5% average) led to low usage of Correctives and Optional Enrichment Activities

Figure 1 — Prior Iteration of Business Messages Project

Figure 2 — Revised Iteration of Business Messages Project

Table 1

Figure 3 — Students' Self-Reported Psychological Safety

Response Scale:
1 Strongly Disagree
2 Disagree
3 Neither Agree nor Disagree
4 Agree
5 Strongly Agree

Student Comments

I had a great team experience and found it to be very easy to talk and share ideas with my teammates. Before going into the team portion of this course, I always found team projects to be unhelpful and a waste of time but throughout the last few weeks, my mind has changed on team projects.

I feel very comfortable taking a risk in this class because I know if I am wrong I won't be ridiculed or shot down for the idea. I feel this class made me almost want to fail so I can see how to improve my writing. I learn the best from making mistakes and I felt comfortable doing that in this class.

Frazier, M. L., Fainshmidt, S., Klinger, R. L., Pezeshkan, A., & Vracheva, V. (2017). Psychological safety: A meta-analytic review and extension. *Personnel Psychology, 70*(1), 113-165. doi:http://dx.doi.org/10.1111/peps.12183

McKinsey & Company. (11 February 2021). Psychological safety and the critical role of leadership development. *McKinsey & Company.* https://www.mckinsey.com/business-functions/people-and-organizational-performance/our-insights/psychological-safety-and-the-critical-role-of-leadership-development

SCAN ME

to **download** the **full paper**