Optimizing Collective Intelligence: The Impact of Cultural Orientations on Team Performance

Dear Editor,

Thank you for the opportunity to revise our research proposal. We have carefully addressed all reviewer comments and significantly strengthened the manuscript based on their valuable feedback. Below are the key improvements made:

Enhanced Introduction and Motivation (Reviewers 1 & 2) We completely restructured the introduction to begin with a compelling real-world example of cultural challenges in multinational teams, specifically citing a Siemens engineering project that faced coordination failures due to cultural differences. This concrete illustration immediately demonstrates the practical relevance of our research question. We also added explicit definitions of key terms (culture, individualism, collectivism, collective intelligence) to eliminate ambiguity, as requested by Reviewer 1.

Strengthened Literature Review Organization (Reviewer 1) Following Reviewer 1's suggestion, we reorganized the literature review into two distinct sections: theoretical foundations and experimental studies. The revised structure provides a clearer logical progression from Hofstede's foundational work through recent empirical findings. We expanded coverage of experimental studies examining cultural diversity effects on team performance, addressing the concern about limited empirical grounding. Additionally, we improved transitions between subsections to create better narrative flow.

Enhanced Methodological Justification (Both Reviewers) We added a comprehensive justification for using the Travelling Salesman Problem, explaining how its multiple solution strategies, coordination requirements, and time pressure make it ideal for revealing cultural differences in team collaboration. This addresses both reviewers' questions about task selection rationale.

Addressed Language and Feasibility Concerns (Reviewer 1) We thoroughly addressed language proficiency concerns by detailing our assessment procedures, inclusion criteria (TOEFL 80+ equivalent), and analytical controls. The revised methodology includes specific protocols for ensuring language barriers don't confound cultural effects, including proficiency testing and post-task interviews to identify communication difficulties.

Improved Recruitment and Timeline Realism (Both Reviewers) We expanded the recruitment strategy section with concrete approaches including multiple channels, referral incentives, and contingency plans. Following Reviewer 1's concern about timeline feasibility, we added backup

recruitment strategies and alternative online collaboration options if in-person recruitment targets aren't met.

Expanded Discussion Section (Reviewer 1) The discussion section was substantially developed to explore hypothetical implications of different outcome patterns. We added detailed consideration of both scenarios where mixed teams outperform homogeneous teams (suggesting diversity advantages) and scenarios where cultural homogeneity predicts superior performance (supporting matching strategies). This provides the academic rigor and depth that Reviewer 1 found lacking in the original draft.

Technical and Organizational Improvements (Reviewer 2) We addressed Reviewer 2's organizational suggestions by adding clearer subheadings throughout the methods section, explicitly labeling the research question early in the introduction, and improving the overall structure for better readability.

These revisions have transformed the proposal from a primarily theoretical exercise into a rigorously designed empirical study with clear practical applications. The enhanced methodology, expanded literature integration, and thorough consideration of limitations and implications position this research to make significant contributions to both cultural psychology and team science literatures.

We believe these improvements directly address all reviewer concerns while maintaining the proposal's innovative integration of computational methods with cross-cultural team research.

Sincerely,

Yifan Ding