Section	Subsection	Expanded Content (Detailed Version)
Introduction	**Context**	This study investigates how collective intelligence (CI)—the enhanced decision-making and problem-solving ability of groups—varies across different cultural backgrounds, specifically between individualistic cultures like the United States and collectivistic cultures like China. In a globalized context, teams increasingly comprise culturally diverse members, making it crucial to understand the influence of cultural orientations on team collaboration, information-sharing, and performance.
	Your Research Question / Proposed Project	The core research questions are: (1) Do collectivist teams outperform individualist teams in complex collaborative tasks? (2) How do cultural differences affect decision-making patterns, leadership structures, and the degree of information-sharing within teams? (3) In mixed-culture teams, does the proportion of individualist vs. collectivist members impact overall team effectiveness? This study proposes an experimental design using culturally categorized teams to answer these questions empirically.
	What Does the Existing Literature Say	Existing scholarship emphasizes that cultural values shape social interactions, leadership dynamics, and communication styles. Collectivist cultures tend to prioritize harmony, consensus, and hierarchy, potentially benefiting coordinated decision-making, while individualistic cultures favor independence, debate, and decentralized leadership, which may foster innovation and critical thinking. However, the direct link between cultural background and collective intelligence performance has not been comprehensively explored in empirical studies.
	Significance With Respect to Existing Knowledge	By bridging gaps in the literature on cross-cultural collaboration and CI, this study advances theoretical understanding of how team wisdom forms differently across cultural contexts. Practically, the findings can offer evidence-based recommendations for designing and managing multicultural teams in corporate,

		academic, and technological settings to optimize performance outcomes.
Data and Methods	**State Data/Design and Justify**	The study will recruit participants from the U.S. (individualist) and China (collectivist), screened via the validated Individualism-Collectivism Scale (Triandis & Gelfland, 1998). Participants will be assigned into culturally homogeneous and heterogeneous teams and asked to solve the Traveling Salesman Problem (TSP), a cognitively demanding task that requires cooperation, information integration, and strategic decision-making. The TSP is selected due to its recognized ability to test complex problem-solving and collaboration under pressure.
	State Analytical Method and Justify	The primary analytical techniques will include ANOVA for comparing CI performance across groups, and multiple regression analysis to explore how communication patterns and leadership structures predict CI outcomes. Natural Language Processing (NLP) methods will quantify information-sharing and interaction patterns during team communication, while Social Network Analysis (SNA) will map communication networks within teams to identify centralized versus distributed decision-making dynamics.
Feasibility	**Evaluation of Approach vs. RQ/Project Goal**	The experimental approach directly tests the core hypotheses by creating controlled, replicable cultural compositions in teams while capturing real-time behavioral and communication data. It allows for disentangling the cultural influences from other confounding factors, providing a robust method for understanding causal relationships between cultural orientation and collective intelligence performance.
	Initial Results (or Mock-up)	Although no empirical results have yet been collected, it is hypothesized that collectivist teams will demonstrate higher cohesion, faster consensus-building, and smoother information-sharing, while individualist teams may generate more diverse solutions but experience longer deliberation periods. Mixed-cultural teams are expected to show complex interaction effects depending on member proportions.

	Proposed Timeline	The project will unfold over nine months: (1) three months for recruitment and pre-screening, (2) two months for running digital experiments, (3) two months for preprocessing and analyzing data using NLP and SNA techniques, and (4) two months for interpreting results, writing, and revising the final report.
	Securing an Advisor/Sponsor	The project is supervised by Dr. Henry Dambanemuya, ensuring adherence to high research and ethical standards throughout the study's development and implementation.
	Cost and Funding (if applicable)	The anticipated budget ranges from $1,000 to $2,000, covering participant compensation ($10 per participant), software licenses for NLP and SNA analysis, and secure data storage. Funding is expected from departmental research grants and external fellowships supporting cross-cultural collaboration studies.
Overall Assessment	**Structure and Alignment**	The research proposal exhibits clear alignment between the research questions, theoretical background, experimental design, and analytical methods. It methodically builds a case for why cultural orientation is an essential but underexplored factor in shaping collective intelligence performance, supporting both theoretical advancement and practical application.