

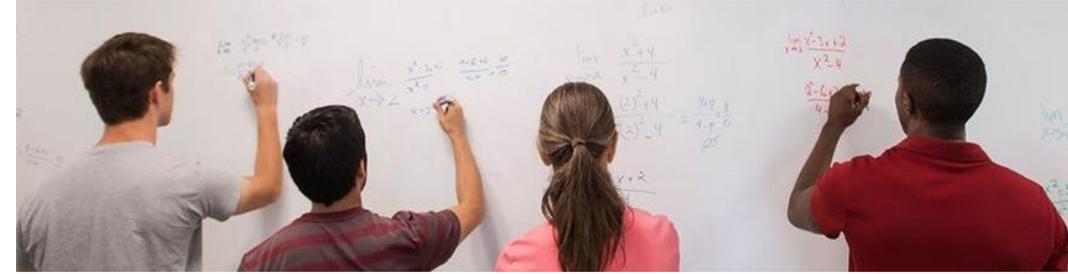
Power Distance and Teaching Identity: Cultural Adaptation of International Graduate Teaching Assistants in U.S. STEM Classrooms

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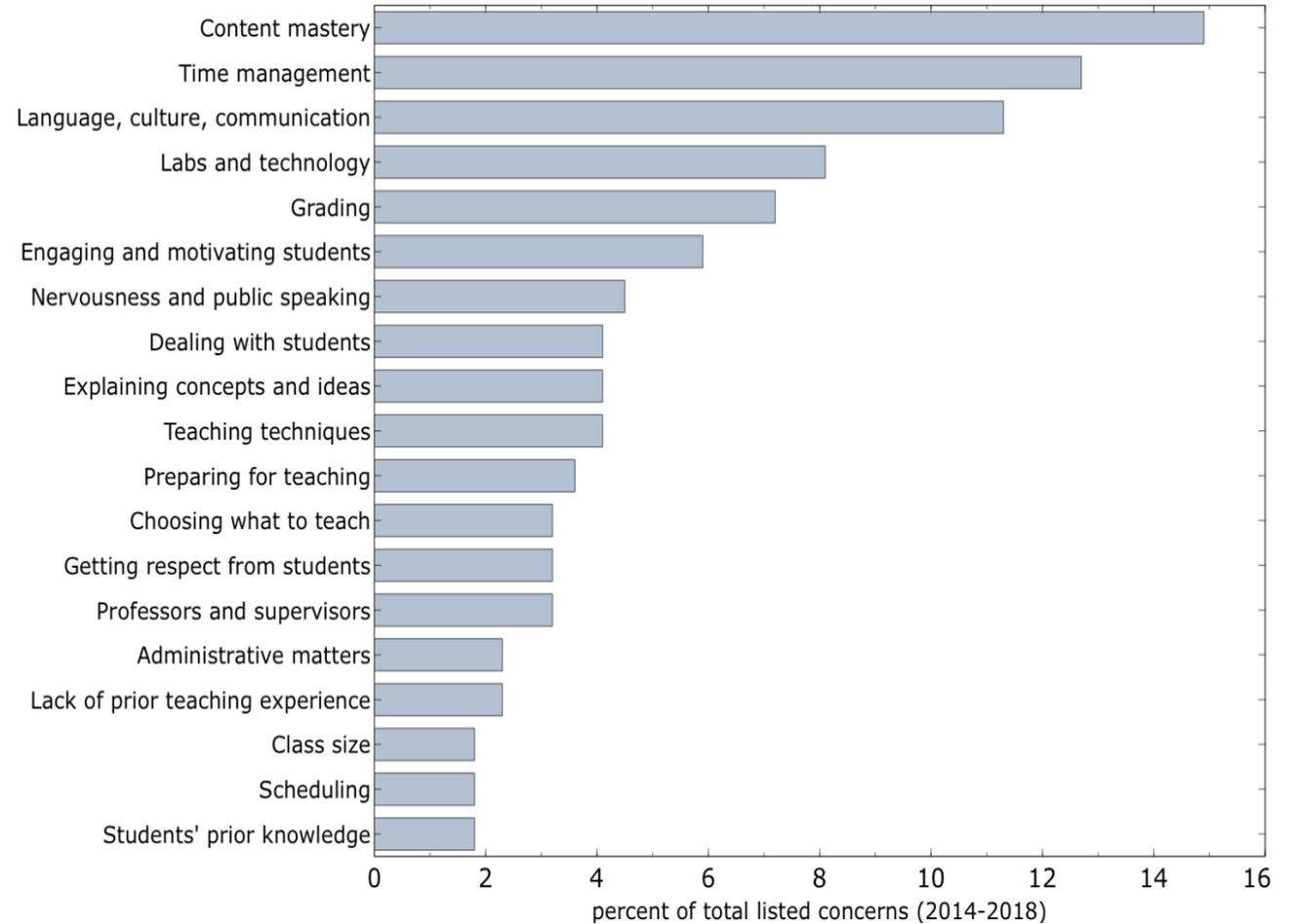
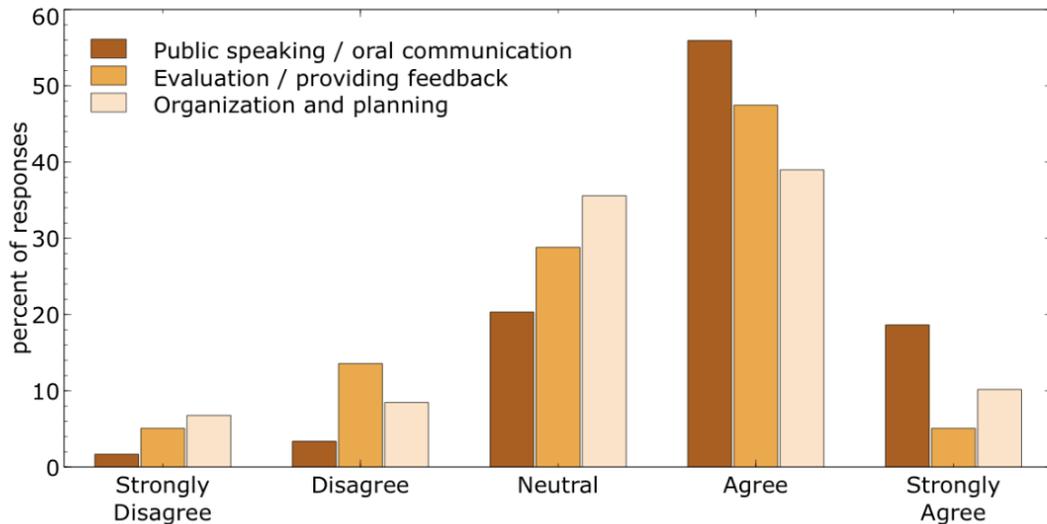
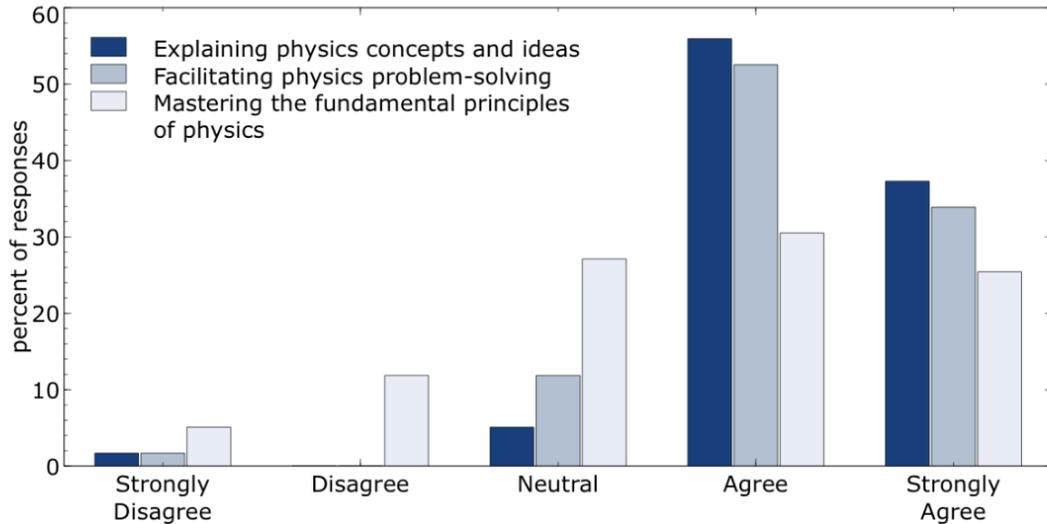
Why Graduate Teaching Assistants (GTAs) Matter

- They teach bulk of laboratory instruction at comprehensive (71%) and research (91%) universities (Sundberg et al., 2005)
- More contact with undergraduate students than do with the professors (Lawrenz et al., 1992)
- Undergraduates often seek GTAs for help due to closer age and social status, making them more approachable than faculty (Moore, 1991)



Benefits of teaching to GTA and GTA Concerns

Alicea-Munoz, E. (2020) Ph.D. thesis



Context of Study

- George Mason engaged in transformation effort in high-enrollment introductory STEM courses promoting active learning as the default approach
- Math, CS, and Physics departments participated
- A two-day GTA workshop introduced to active learning, departmental expectations, hands-on activities, and key university resources
- Each department held additional professional development including a year-long seminar (physics), experienced GTA-led sessions (math), and peer mentoring (CS)
- A significant portion of GTAs were International



Cultural Adaptation for International GTAs (IGTAs)

- IGTAs bring diverse perspectives but face adaptation challenges (Howlett & Nguyen, 2020)
- Surface-level adaptation (Adebayo & Allen, 2020) issues, like language and classroom management
- Home-country norms may differ from U.S. teaching practices (Hofstede, 2011)
- Limited research on different classroom culture values for IGTAs

Research Question

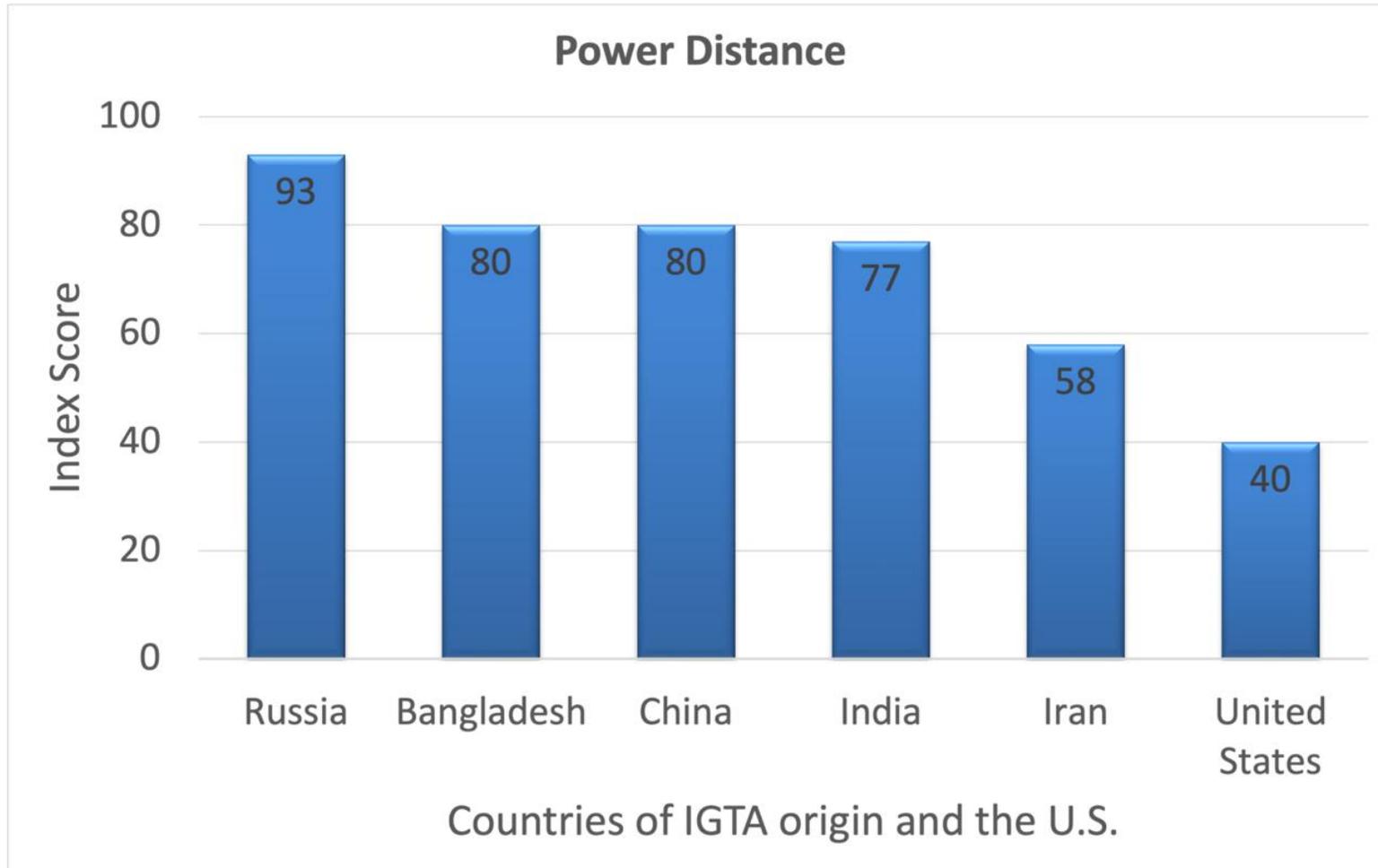
- How do IGTAs make sense of power distance in teaching experiences within U.S. STEM classrooms ?

Conceptual Framework

Hofstede Dimensions	Definition (Hofstede, G. (2011))	Context for GTAs (this work)
Power Distance	<p>Extent to which less powerful members of organizations accept and expect unequal power distribution</p> <p>Large Power Distance → teacher-centered</p> <p>Small Power Distance → student-centered;</p>	<p>Large Power Distance: Structured communication, students don't challenge authority, expected to follow instructor's direction</p> <p>Small Power Distance: Instructor approachable, informal communication, students can question instructor</p>

This framework connects societal-level cultural theory to IGTA's lived teaching experiences in U.S. classrooms

Cross-cultural comparison of Power Distance (Source: Hofstede Insights, 2020)



IGTAs and DGTAs in my data

- 3** Bangladesh
- 2** China
- 1** India
- 1** Iran
- 1** Uzbek/Russia
- 4** U.S.

Data Sources and Analysis Methods

- 8 IGTA and 4 Domestic GTA (DGTA) interviews, Summer 2024
- Thematic analysis with multiple coders
 - Codes based on the (Hofstede, G. 2011) model
 - Power Distance (High, low)
 - Emergent Codes
 - Navigating Cultural Differences
 - Practical Barriers

Results

- High Power Distance cultures (Bangladesh, China, India, Russia/Uzbekistan) → instructors as unquestionable authorities

Rahim (Uzbekistan/Russian influence)

“Deep reverence for teachers, no questioning”

Halim (Bangladesh)

“Military-like discipline, silence”

Ziqi (China)

“Punishment for sharp questions”

Results

- Dong (China) exposure to the U.S. style high school eased transition

“It’s a little bit different from the traditional Chinese education. We had AP course and did not take the Chinese exam, but the SAT, AP, and TOEFL. As a students we did have more rights to interact, especially for STEM course.”

- Farhad (Iran, lower Power Distance) experienced less disorientation

“Varied, with some approachable, and some less so”

- DGTAs understood informal, student-centered U.S. norms from the start
- IGTAs navigated both teaching logistic and cultural adaptation

Takeaways

- Cultural background strongly shapes teaching adaptation; IGTAs from high power distance countries faced greater adjustment challenges in U.S. student-centered classrooms
- Adjustment goes beyond pedagogy, requiring rethinking authority, classroom interaction, and teacher–student roles
- Not all IGTAs adapt the same way; prior exposure to participatory teaching influenced ease of transition
- DGTAs have fewer cultural hurdles; IGTAs must navigate teaching, and culture simultaneously
- Identity growth is ongoing; over time, many IGTAs shifted from enforcing structure to fostering adaptability and dialogue

Future Work

- Explore additional cultural dimensions (individualism vs collectivism, uncertainty avoidance) influencing IGTAs' teaching behaviors, adaptation, and identity
- Examine how prior teaching experience gained as an undergraduate, especially in countries without LA programs, affects teaching identity and adjustment to U.S. classrooms
- Conduct case studies of IGTAs and international students from rote-learning and exam-focused systems to study adaptation to collaborative learning and formative assessment

