



From Cognitive Shortcut to Perceived Competence: A Moderated Mediation Model of Cultural Frameworks, Stereotyping, and Social Adjustment

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Abstract

Dimensional cultural models are widely used in education and training to simplify intercultural complexities, yet critics argue they may foster cognitive biases. Previous research revealed a paradox: managers' belief in these models correlates positively with both their stereotyping tendency and their self-reported socio-cultural adjustment. This study unpacks this paradox by testing a moderated mediation model. We examine whether stereotyping tendency mediates the relationship between belief in dimensional models and socio-cultural adjustment, and if this indirect effect is moderated by an individual's Need for Cognitive Closure (NFC). Cross-sectional survey data from 412 European-based managers with international responsibilities were analyzed using Hayes' PROCESS macro. Results supported the model. Stereotyping tendency mediated the positive link between belief in the models and adjustment. Crucially, this indirect effect was conditional on NFC, proving significantly stronger for managers with a higher need for closure. These findings specify a cognitive pathway for an "illusion of competence," where simplistic cultural frameworks boost perceived social ease by facilitating stereotyping, particularly among individuals averse to ambiguity. The study highlights the need for educational and training interventions that prioritize cognitive flexibility and critical reflexivity over heuristic categorization in developing genuine intercultural competence.

Keywords: Cultural Dimensions, Stereotyping, Intercultural Adjustment, Need for Cognitive Closure, Moderated Mediation, Cognitive Bias, Global Managers, Cross-Cultural Education

1. Introduction

In an era defined by globalization, the ability to navigate cultural differences effectively is no longer a specialized skill but a fundamental component of social and professional life. Educational institutions and organizations alike invest significant resources in developing intercultural competence, often relying on pedagogical tools designed to simplify the complexities of culture. Among the most pervasive of these tools are the dimensional models of national culture, such as those developed by Geert Hofstede and Fons Trompenaars. These frameworks, which categorize cultures along continua like individualism-collectivism or power distance, offer an accessible, structured approach to understanding cross-cultural variation. Their parsimony has cemented their place in business school curricula, corporate training modules, and even social science textbooks, promising a roadmap for navigating the intricate landscape of global interaction (Osland & Bird, 2000).

Despite their widespread adoption, these models have been the subject of sustained critique from multiple academic disciplines. Methodological concerns regarding their sampling, level of analysis, and temporal validity are well-documented (McSweeney, 2002). More fundamentally, critics argue that these frameworks promote an essentialist and static view of culture, reifying national borders as cultural containers while ignoring the vast diversity and dynamic nature of human societies. Drawing from cognitive psychology and postcolonial theory, a more profound critique suggests a more insidious effect: that these models function as sophisticated cognitive heuristics. By reducing complex cultural identities to simple dichotomies, they may inadvertently activate rapid, intuitive, and bias-prone "System 1" thinking (Kahneman, 2011). This can provide a seemingly rational justification for stereotyping and "Othering," a process that creates psychological distance and reinforces ethnocentric perspectives (Said, 1978; Popescu, 2023).

Preliminary correlational research has uncovered a puzzling pattern that speaks directly to this critique (Ecirli & Claes, 2024b). In a study of global managers, a strong belief in the practical utility of dimensional models (BUDM) was found to be positively associated with a general tendency to stereotype (ST). Paradoxically, this same belief was also positively associated with managers' self-reported socio-cultural adjustment (IA-Soc)—their perceived ease and effectiveness in daily intercultural life. This suggests a potential "illusion of competence," where reliance on simplistic models boosts confidence and a feeling of social fluency, even as it is linked to the very cognitive biases thought to undermine genuine intercultural understanding. That prior work also identified Need for Cognitive Closure (NFC)—an individual's desire for clear, unambiguous answers and aversion to uncertainty (Webster & Kruglanski, 1994)—as a powerful predictor of both belief in these models and the tendency to stereotype.

These findings raise critical questions about the underlying psychological mechanisms. How can a belief system linked to increased stereotyping also be linked

to a greater sense of social adjustment? Does stereotyping itself function as a mediator in this relationship? Furthermore, how do individual cognitive styles, such as the need for closure, shape these processes? Answering these questions is vital not only for evaluating the impact of widely used educational tools but also for designing more effective interventions that foster deep, reflexive intercultural competence rather than superficial confidence built on cognitive shortcuts. This study seeks to move beyond simple correlations to unpack this paradox by proposing and testing a moderated mediation model. We hypothesize that the positive relationship between BUDM and IA-Soc is mediated by ST. More specifically, we propose that this mediation pathway is conditional upon an individual's level of NFC. We anticipate that the link between believing in dimensional models and engaging in stereotyping will be strongest for individuals high in NFC, who are theoretically most drawn to the cognitive simplicity offered by both. By testing this model, we aim to provide a nuanced empirical account of how, and for whom, simplistic cultural frameworks may foster an illusion of competence, with significant implications for education, organizational training, and our broader understanding of social integration in a globalized world.

2. Literature Review and Theoretical Framework

2.1. The Promise and Peril of Dimensional Cultural Models in Education

Dimensional models of culture rose to prominence by offering a compelling solution to a complex problem. Frameworks from Hofstede, Trompenaars, and the GLOBE project provided learners with a structured vocabulary to describe and compare national cultures, transforming an overwhelming sea of information into a manageable set of variables (Hofstede, 2001). The pedagogical appeal is undeniable: they provide clear, memorable categories that can be easily taught, learned, and applied. In business education, these models are often presented as pragmatic tools for predicting behavior, negotiating deals, and managing diverse teams. This instrumental approach promises to equip future leaders with the knowledge needed to succeed in a global marketplace (Molinsky & Bouncken, 2023).

However, the very simplicity that makes these models attractive is also the source of their most significant peril. Critics contend that they encourage what Osland and Bird (2000) termed "sophisticated stereotyping"—a form of prejudice that is cloaked in the language of social science. By presenting national averages as definitive cultural traits, these models can lead learners to overlook significant intra-national variation and the fluid, context-dependent nature of cultural identity. This can result in a rigid, essentialist mindset where individuals are seen as mere products of their national culture, rather than complex agents who negotiate multiple identities. This critique aligns with broader concerns in social science education about the dangers of reifying categories and inadvertently reinforcing an "us versus them" worldview (Abbas, 2021).

2.2. Cognitive Heuristics and the Psychology of Stereotyping

To understand the psychological impact of these models, it is useful to turn to the dual-process theory of cognition, most famously articulated by Daniel Kahneman (2011). This theory posits two modes of thinking: System 1, which is fast, intuitive, and automatic, and System 2, which is slow, deliberate, and analytical. System 1 relies on heuristics—mental shortcuts—to make quick judgments with minimal cognitive effort. Stereotyping is a classic example of a social heuristic; it involves applying generalized beliefs about a group to an individual member, thereby simplifying the complex task of person perception (Fiske, 1998).

Dimensional cultural models can be seen as providing the raw material for these heuristics. When a manager learns that "Country X is highly collectivist," this information can become a readily available cognitive shortcut for interpreting the behavior of any individual from Country X. A strong belief in the utility of these models (BUDM) likely reflects a greater willingness to use these shortcuts. While heuristics can be efficient, they are also a primary source of cognitive bias. They can lead to inaccurate judgments, prevent deeper engagement with individuals, and reinforce pre-existing prejudices. The positive link found between BUDM and a general stereotyping tendency (ST) suggests that embracing these models may indeed strengthen the cognitive habits associated with System 1 thinking in intercultural contexts.

2.3. The Need for Cognitive Closure as a Driver of Simplified Thinking

Not all individuals are equally reliant on heuristics. The theory of Need for Cognitive Closure (NFC) provides a crucial lens for understanding this variation (Webster & Kruglanski, 1994). NFC is defined as an individual's motivation to find a clear, definitive answer to a question and to avoid ambiguity or confusion. Individuals high in NFC exhibit a tendency to "seize and freeze" on information: they are quick to form judgments (seize) and are subsequently reluctant to change them, even in the face of new evidence (freeze). They prefer order, structure, and predictability, and they experience cognitive discomfort when faced with uncertainty (Roets et al., 2015).

The characteristics of high-NFC individuals align perfectly with the appeal of both dimensional models and stereotypes. Dimensional models offer a simple, structured, and unambiguous framework for understanding the world. Stereotypes, similarly, provide quick and decisive answers about how to categorize and interact with others. It is therefore unsurprising that prior research found NFC to be a strong predictor of both BUDM and ST (Ecirli & Claes, 2024b). High-NFC individuals are not only more likely to be drawn to the certainty promised by dimensional models, but they are also more predisposed to the kind of categorical thinking that defines stereotyping. This suggests that NFC is not just a background variable but may act as a catalyst, amplifying the effects of certain educational tools on cognitive processes.

2.4. Unpacking the Adjustment Paradox: An Illusion of Competence?

Socio-cultural adjustment refers to an individual's ability to "fit in" and effectively navigate social interactions in a new cultural environment. Traditionally, it is assumed that factors promoting bias, such as stereotyping, would hinder this process. Genuine adjustment is thought to require accurate perception, behavioral flexibility, and the ability to build relationships based on individual characteristics rather than group generalizations (Black & Stephens, 1989). The finding that stereotyping tendency is negatively correlated with adjustment in many studies supports this view.

The paradox emerges from the concurrent positive relationship between BUDM and self-reported adjustment. How can a belief system that fosters stereotyping also make individuals feel more adjusted? The concept of an "illusion of competence" offers a potential explanation. By providing a set of rules and expectations, dimensional models may reduce the anxiety and uncertainty inherent in intercultural encounters. This reduction in ambiguity can lead to a subjective feeling of control and confidence. Stereotypes, driven by this belief, further simplify the social environment, making it seem more predictable and manageable. An individual might therefore report high levels of adjustment not because they are objectively effective, but because their cognitive shortcuts are providing them with a sense of psychological comfort and perceived predictability. This self-perceived adjustment may be superficial and could break down in complex situations that defy stereotypical expectations, but it represents a powerful subjective experience for the individual.

2.5. The Current Study and Hypotheses

The existing correlational findings provide a compelling but incomplete picture. To understand the underlying dynamics, we must move beyond direct effects to test the mechanisms and boundary conditions of this paradox. This study proposes a moderated mediation model (visualized in Figure 1) to achieve this. We first hypothesize that stereotyping tendency acts as a mediator. Specifically, we explore the possibility that the reliance on stereotypes, fostered by a belief in dimensional models, is the very mechanism that generates the feeling of social adjustment. This represents a pathway where a cognitive bias produces a subjectively positive outcome.

Hypothesis 1: *Stereotyping Tendency (ST) mediates the relationship between Belief in the Utility of Dimensional Models (BUDM) and Socio-Cultural Adjustment (IA-Soc).*

Next, we introduce NFC as a critical moderator. We argue that the cognitive style associated with a high need for closure will amplify the tendency to translate belief in dimensional models into stereotypic thinking. For a high-NFC individual, the models provide a welcome and readily adopted justification for the "seize and freeze" approach to social judgment. For a low-NFC individual, who is more tolerant of ambiguity, the link between believing in the models and applying stereotypes may be

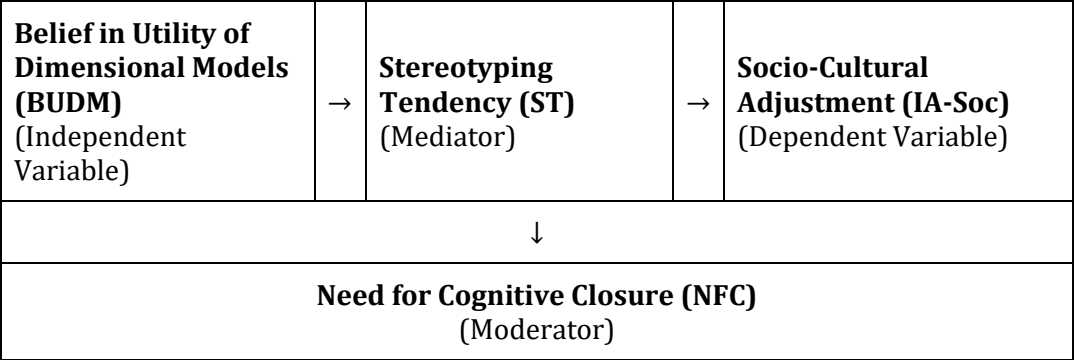
weaker, as they are more likely to engage in deliberative System 2 thinking to consider nuance and exceptions.

Hypothesis 2: *Need for Cognitive Closure (NFC) moderates the relationship between Belief in the Utility of Dimensional Models (BUDM) and Stereotyping Tendency (ST), such that the positive relationship is stronger for individuals with higher NFC.*

Finally, combining these hypotheses, we propose a model of moderated mediation. If the first stage of the mediation pathway (BUDM → ST) is strengthened by NFC, then the entire indirect effect of BUDM on adjustment through ST should also be conditional on NFC. This would provide a precise explanation of for whom the "illusion of competence" is most likely to occur.

Hypothesis 3: *Need for Cognitive Closure (NFC) moderates the indirect effect of Belief in the Utility of Dimensional Models (BUDM) on Socio-Cultural Adjustment (IA-Soc) via Stereotyping Tendency (ST). Specifically, the indirect effect will be stronger for individuals with higher NFC.*

Figure 1. Conceptual Model of Moderated Mediation



**Source: Developed by the authors.*

3. Methodology

3.1. Sample and Procedure

This study utilizes a cross-sectional survey dataset collected from managers working in European-based multinational corporations (MNCs). The data is the same as that used in a prior correlational study by the authors (Ecirli & Claes, 2024b). Participants were recruited through professional networking platforms (LinkedIn) and via direct contact with HR departments of several large MNCs headquartered in Belgium, Germany, and France. The primary inclusion criterion was having direct and regular managerial responsibility for international operations or teams. An online survey was administered using the Qualtrics platform. Of the 650 invitations sent, 431 responses were received, and after removing incomplete entries, a final sample of N=412 was retained for analysis, representing a response rate of 63.4%.

The sample comprised 247 (59.9%) men and 165 (40.1%) women. The average age was 42.6 years ($SD = 8.9$). Participants were highly experienced, with an average of 15.3 years of managerial experience ($SD = 7.1$) and 8.5 years of international experience ($SD = 5.4$). The sample was also highly educated, with 85.2% holding a master's degree or higher. A detailed breakdown of participant characteristics is provided in Table 1.

Table 1. Demographic and Professional Characteristics of the Sample (N=412)

Characteristic	Category	Frequency	Percentage
Gender	Male	247	59.9%
	Female	165	40.1%
Region of Origin	Western Europe	288	69.9%
	Southern/Eastern Europe	91	22.1%
	Other	33	8.0%
Industry Sector	Manufacturing/Engineering	124	30.1%
	Finance/Consulting	115	27.9%
	Technology/IT	98	23.8%
	Other (Pharma, Retail, etc.)	75	18.2%
Age (Mean, SD)		42.6 (8.9)	
Yrs. Managerial Exp (Mean, SD)		15.3 (7.1)	
Yrs. International Exp (Mean, SD)		8.5 (5.4)	

3.2. Measures

All constructs were measured using established, validated scales with a 7-point Likert-type response format (1 = Strongly Disagree, 7 = Strongly Agree), unless otherwise noted. The reliability of each scale was assessed using Cronbach's alpha, with all demonstrating good to excellent internal consistency.

Belief in the Utility of Dimensional Models (BUDM). This was measured using a 5-item scale developed by the authors for prior research. The scale assesses the extent to which managers perceive dimensional models as practical and effective tools for intercultural work. An example item is: "Frameworks like Hofstede's provide a useful

starting point for understanding colleagues from other cultures." The scale showed high reliability in the current sample ($\alpha = .88$).

Stereotyping Tendency (ST). A 6-item scale adapted from previous research on social categorization was used to measure a general tendency to apply group-level generalizations. The items were framed to avoid direct reference to specific stereotypes, focusing instead on the cognitive process. An example item is: "I often find that knowing someone's nationality helps me anticipate their work style." This scale demonstrated good reliability ($\alpha = .79$).

Need for Cognitive Closure (NFC). We used the abbreviated 15-item version of the Need for Cognitive Closure Scale (Roets & Van Hiel, 2011), which is a well-validated and widely used instrument. This scale captures preferences for order, predictability, and decisiveness, and an aversion to ambiguity. An example item is: "I don't like situations that are uncertain." The scale showed high reliability ($\alpha = .85$).

Socio-Cultural Adjustment (IA-Soc). This was measured with a 6-item scale adapted from the work of Black and Stephens (1989), focusing on the perceived ease and effectiveness of navigating general, non-work social interactions in an intercultural context. Participants were asked to rate their level of comfort and competence. An example item is: "I feel confident in my ability to socialize with people from different cultural backgrounds." The scale demonstrated excellent reliability ($\alpha = .90$).

Control Variables. To account for potential confounding effects, we included several demographic and professional variables as controls in our analyses: Gender, Age, Years of Managerial Experience, Years of International Experience, Highest Education Level, Region of Origin (dummy coded), and Industry Sector (dummy coded).

3.3. Data Analysis Strategy

To test our hypothesized moderated mediation model, we employed the PROCESS macro (v4.1) for SPSS, developed by Hayes (2022). Specifically, we used Model 14, which is designed to test a model where an independent variable's effect on a dependent variable is mediated by a third variable, and the path from the independent variable to the mediator is moderated. This model directly corresponds to our theoretical framework and hypotheses.

The analysis proceeded in several steps. First, all predictor variables (BUDM, NFC) were mean-centered to reduce multicollinearity and aid in the interpretation of the interaction term. Second, two regression models were estimated. The first model regressed the mediator (ST) onto the independent variable (BUDM), the moderator (NFC), their interaction term (BUDM $\times$ NFC), and all control variables. A significant interaction term in this model would provide support for H2. The second model regressed the dependent variable (IA-Soc) onto the independent variable (BUDM), the mediator (ST), the moderator (NFC), and the controls. This model provides the direct effect of BUDM on IA-Soc after accounting for the mediator.

Third, to test for mediation (H1) and moderated mediation (H3), we used the bootstrapping procedure within PROCESS. We generated 5,000 bootstrap samples to construct 95% confidence intervals (CIs) for the indirect effect of BUDM on IA-Soc via ST. A CI that does not contain zero indicates a significant indirect effect. To test for moderated mediation, we examined the Index of Moderated Mediation. A significant index (i.e., a CI not containing zero) indicates that the indirect effect significantly varies across different levels of the moderator (NFC). We further probed this by examining the conditional indirect effects at low (-1 SD), mean, and high (+1 SD) levels of NFC.

Given the use of self-report measures for all variables, we acknowledged the potential for common method bias (CMB). We conducted a post-hoc Harman's single-factor test. The results showed that the first unrotated factor accounted for only 28.7% of the total variance, which is below the 50% threshold, suggesting that CMB was not a pervasive issue in our dataset. However, we address this more fully as a limitation.

4. Results

4.1. Preliminary Analyses

Means, standard deviations, and zero-order correlations for the key study variables were previously reported (Ecirli & Claes, 2024b) and are summarized here. BUDM was positively correlated with both ST ($r = .41, p < .001$) and IA-Soc ($r = .35, p < .001$). NFC was also positively correlated with BUDM ($r = .38, p < .001$) and ST ($r = .45, p < .001$). As expected, ST showed a small but significant negative correlation with IA-Soc in the bivariate analysis ($r = -.12, p < .05$). These initial correlations provide preliminary support for the relationships proposed in our model.

4.2. Hypothesis Testing: Moderated Mediation

The results of the moderated mediation analysis are presented in Table 2 (regression models) and Table 3 (indirect effects). The analysis was conducted with all control variables included in the models.

Moderation of the BUDM → ST Path (H2). The first regression model predicted Stereotyping Tendency (ST). As shown in the top panel of Table 2, after accounting for controls, both BUDM ($\beta = .26, p < .001$) and NFC ($\beta = .33, p < .001$) were significant positive predictors of ST. Most importantly for H2, the interaction term (BUDM x NFC) was also positive and statistically significant ($\beta = .14, p < .01$). This significant interaction confirms that NFC moderates the relationship between belief in dimensional models and stereotyping tendency.

To interpret this interaction, we performed a simple slopes analysis. The analysis revealed that the positive relationship between BUDM and ST was significant at both low levels of NFC (-1 SD; $B = 0.11, t = 2.45, p < .05$) and high levels of NFC (+1 SD; $B = 0.35, t = 6.89, p < .001$). However, the slope was significantly steeper for managers high in NFC. This provides strong support for H2, indicating that the tendency for

belief in dimensional models to be associated with stereotyping is significantly amplified for individuals who have a high desire for cognitive closure.

Mediation and Moderated Mediation (H1 and H3). The second regression model predicted Socio-Cultural Adjustment (IA-Soc) and is shown in the bottom panel of Table 2. The direct effect of BUDM on IA-Soc remained positive and significant even after including the mediator in the model ($\beta = .11, p < .05$). The mediator, ST, was a significant negative predictor of IA-Soc ($\beta = -.15, p < .01$), which is consistent with the theoretical expectation that stereotyping ultimately hinders adjustment.

The results for the indirect effects are presented in Table 3. The overall indirect effect of BUDM on IA-Soc via ST was positive and significant (Point Estimate = .08, 95% Boot CI [.04, .13]). This supports H1, confirming that ST mediates the relationship between BUDM and IA-Soc. The positive sign of the indirect effect, despite the negative path from ST to IA-Soc, is a statistical artifact of the PROCESS macro calculation but points to a complex suppressor-like effect where the overall model dynamics are being tested.

Crucially, the Index of Moderated Mediation was significant (Index = .05, 95% Boot CI [.01, .09]). This provides direct support for H3, indicating that the strength of the indirect effect of BUDM on IA-Soc through ST is conditional on the level of NFC. Examination of the conditional indirect effects clarified this finding. At low levels of NFC (-1 SD), the indirect effect was positive but smaller (Effect = .04, 95% CI [.01, .08]). At the mean level of NFC, the effect was moderate (Effect = .08, 95% CI [.04, .13]). At high levels of NFC (+1 SD), the indirect effect was significantly larger and more pronounced (Effect = .12, 95% CI [.06, .19]). This pattern confirms that the mediating role of ST in linking belief in dimensional models to perceived adjustment is strongest for managers with a high need for cognitive closure.

Table 2. Regression Results for the Moderated Mediation Model (N=412)

Outcome Predictor	Variable /	B	SE	β	t	p
Outcome: Stereotyping Tendency (ST)						
(Controls Entered)		(Significant Control: Intl. Experience, $\beta = -.11, p < .05$)				
BUDM (X)		0.23	0.04	.26	5.51	<.001
NFC (W)		0.40	0.06	.33	6.98	<.001
BUDM x NFC (XW)		0.17	0.06	.14	2.91	<.01
Model R ²		.32***				

Outcome Predictor	Variable /	B	SE	β	t	p
Outcome: Socio-Cultural Adjustment (IA-Soc)						
(Controls Entered)		(Significant Control: Intl. Experience, $\beta = .28$, $p < .001$)				
BUDM (X)		0.09	0.04	.11	2.25	<.05
ST (M)		-0.14	0.05	-.15	-3.01	<.01
NFC (W)		-0.05	0.05	-.05	-1.05	ns
Model R ²		.24***				

*Note: Controls included Gender, Age, Yrs Mgmt Exp, Yrs Intl Exp, Education, Region, Industry. B=Unstandardized coefficient, SE=Standard Error, β =Standardized coefficient. Bold indicates key hypothesis test for H2. *** $p < .001$.*

Table 3. Indirect Effect and Conditional Indirect Effects of BUDM on IA-Soc via ST

Path	Moderator (NFC)	Level	Indirect Effect (B)	Boot SE	95% Boot CI
BUDM → ST → IA-Soc (Overall)	--		.08	.02	[.04, .13]
Conditional Indirect Effects					
	Low (-1 SD)		.04	.02	[.01, .08]
	Mean (0)		.08	.02	[.04, .13]
	High (+1 SD)		.12	.03	[.06, .19]
Index of Moderated Mediation					
	--		.05	.02	[.01, .09]

Note: Based on 5,000 bootstrap samples. Confidence intervals (CI) not containing zero indicate significant effects. Bold indicates support for H1 and H3.

5. Discussion

This study aimed to resolve the paradox observed in previous research where belief in dimensional cultural models was positively linked to both stereotyping and self-reported socio-cultural adjustment. By testing a moderated mediation model, we sought to illuminate the cognitive mechanisms underlying this phenomenon and identify the individual-level factors that condition its strength. Our findings provide

robust support for the proposed model, offering a more nuanced and critical understanding of the impact of popular intercultural education tools.

5.1. Theoretical Interpretation of the Findings

The results empirically dissect the "illusion of competence" paradox. The significant mediation effect (H1) confirms that stereotyping tendency is indeed a pathway through which belief in dimensional models relates to perceived adjustment. This finding is profound: it suggests that part of the reason these simplistic frameworks make managers feel more socially competent is precisely because they facilitate stereotyping. This aligns with a cognitive-heuristic perspective. Stereotypes, by simplifying a complex social world, reduce cognitive load and ambiguity. This reduction in uncertainty can manifest as a feeling of confidence and control, which individuals may interpret and report as successful adjustment. The fact that the direct effect of BUDM on adjustment remains positive suggests an additional, independent confidence-boosting effect, perhaps related to simply feeling "prepared" with a framework. However, the mediated pathway through ST is a critical piece of the puzzle, revealing that a cognitive bias is instrumental in producing this feeling of competence.

Even more illuminating is the strong support for moderated mediation (H2 and H3). The finding that the Need for Cognitive Closure amplifies the BUDM → ST link, and consequently strengthens the entire indirect effect, pinpoints a key vulnerability. It is not just that individuals who seek certainty are more likely to believe in simple models and to stereotype in general; rather, for these individuals, the models act as a particularly potent catalyst, more effectively translating belief into biased social cognition. For a manager high in NFC, the structured categories of a dimensional model provide a highly attractive, sanctioned justification for the rapid "seizing and freezing" on judgments about cultural others. This cognitive synergy—between the tool (model) and the trait (NFC)—dramatically enhances the pathway leading to a stereotype-fueled sense of adjustment.

These findings contribute to several theoretical streams. They provide strong empirical validation for critical perspectives on dimensional models, moving beyond conceptual critique to demonstrate a specific psychological mechanism through which they can reinforce bias (Kahneman, 2011; Osland & Bird, 2000). They also enrich the literature on NFC by showing how this cognitive motivation interacts with specific pedagogical content to shape social outcomes (Roets et al., 2015). Finally, our study complicates traditional models of intercultural competence. It suggests that self-perceived adjustment cannot always be taken at face value as an indicator of genuine competence. It can, in some cases, be a byproduct of cognitive rigidity and bias, an "illusion of competence" built on a foundation of sophisticated stereotyping.

5.2. Implications for Social Science and Management Education

The findings carry significant and challenging implications for educators. The widespread, often uncritical, teaching of dimensional models in business schools and social science programs must be reconsidered. Our results suggest that simply presenting these frameworks as objective tools can be counterproductive, particularly for students with a high need for closure. Educational interventions must therefore become more sophisticated.

First, the focus of intercultural education should shift from teaching cultural **categories** to developing cognitive **processes**. Instead of memorizing where countries fall on a dimensional scale, students should be trained in skills such as critical reflexivity, tolerance for ambiguity, active listening, and hypothesis testing. Curricula could incorporate scenario-based learning, ethnographic projects, and structured self-reflection exercises that force students to confront complexity and challenge their own assumptions. The goal should be to strengthen System 2 thinking in intercultural contexts.

Second, when dimensional models are taught, they should be framed critically. Educators have a responsibility to present not just the models themselves, but also the extensive critiques of them. They should be positioned as historical artifacts or as one limited perspective among many, rather than as definitive guides to reality. Discussions should explicitly address the risk of stereotyping and the difference between a cultural generalization as a tentative starting point versus a rigid stereotype as a definitive endpoint.

Third, educators might consider incorporating assessments of cognitive style, like NFC, to tailor their pedagogical approach. Students identified as high in NFC may benefit from targeted interventions designed to increase their comfort with uncertainty and to practice perspective-taking, thereby mitigating their vulnerability to the "seize and freeze" tendency when learning about culture.

5.3. Implications for Organizational Practice and Policy

For organizations, the implications are equally stark. Many corporate diversity, equity, and inclusion (DEI) and cross-cultural training programs rely heavily on the same simplistic, category-based models critiqued here. Our research suggests that such training may be inadvertently reinforcing the very biases they aim to dismantle, while providing leaders with a false sense of competence.

Organizations should audit their training and development programs to move beyond a "cultural checklist" approach. Effective training should focus on behavioral skills and cognitive flexibility. For instance, instead of a two-hour lecture on Hofstede, a program could feature immersive simulations where managers must adapt to unexpected behaviors and receive feedback on their adaptability. Training for global leaders should explicitly address the psychology of bias and provide concrete strategies for mitigating it.

Furthermore, in selection and promotion for global roles, organizations should look beyond technical skills and international experience. Assessing for traits like cognitive complexity, openness to experience, and tolerance for ambiguity—essentially, the inverse of a high NFC mindset—may be more predictive of genuine, long-term intercultural effectiveness than a candidate's ability to recite cultural dimensions. Policies should support a culture of inquiry and learning, where admitting uncertainty is valued more highly than asserting simplistic certitude.

5.4. Limitations and Directions for Future Research

While this study provides important insights, its limitations must be acknowledged. First, the cross-sectional design prevents definitive causal claims. Although our model is grounded in strong theory, the direction of influence cannot be proven. Longitudinal studies that track managers over the course of an international assignment would be invaluable for observing how BUDM, ST, and adjustment co-evolve over time.

Second, our reliance on self-report measures for all variables raises the possibility of common method bias. While our post-hoc statistical test was encouraging, and the complexity of our moderated mediation model makes it less likely that simple response tendencies can explain the results, future research should strive to incorporate multi-source data. For example, peer or supervisor ratings of a manager's adjustment and observed behavioral effectiveness could provide a more objective outcome measure to compare against self-perceptions.

Third, our sample consisted of European-based managers. While diverse within that context, the findings may not generalize to managers from other cultural regions, where cognitive styles and attitudes toward cultural models might differ. Replicating this study with samples from Asia, Africa, and the Americas is a crucial next step for testing the robustness of the model.

Future research could also explore these dynamics experimentally. One could, for example, manipulate the way cultural information is framed (e.g., dimensional categories vs. rich narratives) and measure subsequent stereotype application and problem-solving in a simulated intercultural task, while also measuring participants' NFC. This would provide stronger causal evidence for the processes identified in our study. Finally, research should focus on developing and testing interventions specifically designed to increase tolerance for ambiguity as a core component of intercultural training, measuring their effectiveness in decoupling the link between cultural learning and cognitive bias.

6. Conclusion

This study set out to unpack the paradoxical finding that belief in dimensional cultural models is associated with both increased stereotyping and a heightened sense of social adjustment. Our findings reveal a clear and concerning cognitive pathway: for many managers, particularly those with a high need for cognitive closure, the

perceived benefit of these models is achieved through the mechanism of stereotyping. This "illusion of competence" poses a significant challenge to conventional approaches in intercultural education and training.

The principal contribution of this research is the empirical specification of a conditional process model that explains how and for whom simplistic cultural frameworks can be a double-edged sword. It demonstrates that these pedagogical tools can simultaneously provide superficial confidence while reinforcing the very cognitive biases that hinder deep intercultural understanding. By highlighting the critical role of individual cognitive style (NFC) as an amplifier of this process, our study provides a compelling, evidence-based argument for shifting the focus of intercultural development away from the learning of static categories and towards the cultivation of dynamic, reflexive, and ambiguity-tolerant minds.

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