

The Relationship of Cultural Intelligence, Student's Innovative Work Behavior and The Influence of Interpersonal Trust: Case Study of Indonesian International Student Mobility Awards

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Abstract

Rapidly shifting market due to globalization increases the nation's demand for young innovators. Innovators from Generation Z are needed to support the future growth of Indonesia. Several initiatives from the government to elevate Indonesian education to grow innovations, such as establishing an international student mobility scholarship program for higher education students. However, research on how the program can increase innovative work behaviour for Indonesian students is still unclear. This research investigates how Indonesian students perceive the impact of international student mobility on their innovative work behaviour, focusing on the role of cultural intelligence and its effect on innovative work behaviour through interpersonal trust. A quantitative approach was adopted for this study to examine the relationships between the variables with the assistance of SmartPLS 4.0 software. An online questionnaire was distributed to 302 respondents consisting of Indonesian students who had completed the Indonesian International Student Mobility Awards program in 2022 from all host country regions. This study demonstrates that students with higher cultural intelligence positively influence their innovative work behaviour. Interpersonal trust also influences the process as a mediating role in the relationship between cultural intelligence and innovative work behaviour among students in a multicultural environment. This study can be a reference for future research and stakeholders to improve education quality by focusing on the impact of cultural intelligence on students' innovative work behaviour in the context of cross-cultural interaction, specifically Indonesian students that participate in international student mobility programs from the Indonesian government. Such research has not been explored extensively beforehand, making this study valuable addition to the pedagogy and management science field.

Keywords: cultural intelligence; innovation; interpersonal trust; human capital

A. INTRODUCTION

Given the intensifying global competition, rapid technological advancements, and dynamic market conditions, innovation is increasingly recognized as a crucial driver of competitive advantage and economic growth (Tushman & O'Reilly, 2002). However, Indonesia is currently facing challenges in terms of innovation performance, ranking 75th out of 132 economies in the 2022 Global Innovation Index (GII), which evaluates 80 indicators of innovation, including education (Dutta, Lanvin, Leon, & Wunsch-Vincent, 2022). To address this issue, Littlewood's (2004) study highlights the significance of human capital in determining organizational competitiveness, problem-solving capabilities, and adaptability to the ever-changing environment to achieve organizational goals (Mariz Pérez, Teijeiro Alvarez, & García Alvarez, 2012). In Indonesia, the presence of 74.93 million Generation Z citizens in 2020 suggests that within the next seven years, Generation Z will enter the workforce's productive age (Jayani, 2021). Recognizing the forthcoming dominance of the Generation Z workforce, it becomes urgent for the government to prioritize the nurturing and development of the current young generation.

Education aims to equip students for the upcoming job market, ensuring their preparedness to navigate the competitive future environment. Education's focus on innovation is crucial in shaping a future workforce with a competitive edge (Helmy & Pratama, 2018). When individuals possess innovative work behaviour, they contribute significantly to the success of organizations and enhance their competitive advantage (Afsar, Badir, & Saeed, 2014). Therefore, it is essential for education to foster students' innovative work behaviour, as it is a vital skill driving sustained success in businesses, industries, and entrepreneurship (Dyer, Gregersen, & Christensen,

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2011). The ability of the workforce to drive organizational success plays a pivotal role in the growth of the Indonesian economy. Preparing the future workforce and cultivating innovative capabilities are crucial to meet the evolving needs of the future (Zhong & Liu, 2014). Building innovative work behaviour among students during their early education phase, before they enter the workforce, presents a solution to develop these skills within a sufficient time (Etikariena, 2017).

At present, the Indonesian government, specifically the Ministry of Education, Culture, Research, and Technology (MoECRT), acknowledges the significance of nurturing a strong workforce from Generation Z through the implementation of the *Mereka Belajar Kampus Merdeka* (MBKM) policy. MBKM aims to enhance higher education graduates' competencies, to mould them into exceptional future leaders through experiential learning (Kemendikbud, 2020). One of the initiatives under the MBKM policy is the Indonesian International Student Mobility Awards (IISMA). IISMA is designed to provide financial support to Indonesian students to pursue studies at renowned universities abroad. Undergraduate students who successfully undergo the selection process for the IISMA program are granted scholarships, allowing them to spend a semester (4-6 months) at a partner university overseas. This opportunity enables them to explore courses beyond their majors, improve their intercultural communication and leadership capabilities, immerse themselves in the host country's culture, and build a global network with other ambitious international students (IISMA, 2023). The appealing benefits and enriching experiences IISMA offers have garnered significant interest, as evidenced by the registration of 7501 applicants and the selection of 1155 awardees in 2022 (Kemendikbud, 2022). With an increasing number of registrations, the program is set to choose even more awardees in 2023, reflecting a 69% rise compared to the previous year (Kemendikbud, 2022).

Studying how the international student mobility program can foster innovative behaviour during its implementation is crucial, especially as it is a government-funded initiative. IISMA, being a part of the MBKM program, aims to cultivate student innovation and independence to contribute effectively to organizational goals (Kemendikbud, 2020). However, despite the program's academic evaluations, concrete evidence is lacking to support its intercultural objectives, as noted (Gillespe, 2002). His ambiguity has raised concerns among the public regarding the program's importance and impact on the future workforce. While thousands of awardees received scholarships with the expectation of producing committed individuals achieving significant accomplishments during the program, the reality shows that many awardees tend to shift their focus away from their academic pursuits (Redaksi Suara Mahasiswa, 2023). The relationship between cultural intelligence and innovative work behaviour is not adequately explored in previous research, particularly among students in higher education institutions (Etikariena, 2020; Kistyanto et al., 2021). As a result, questions regarding IISMA's accountability as a program funded by the nation remain unresolved, as there is limited research on how grantees should be encouraged to foster academic achievements through innovation.

In innovative work behaviour, individuals recognize problems and generate new or adopted ideas to solve them (Scott & Bruce, 1994). Education must focus on enhancing innovative work behaviour encompassing four dimensions: idea exploration, idea generation, idea championing, and idea implementation (Jong & Hartog, 2010). Study abroad experiences can empower these behaviours by exposing students to multicultural environments and fostering diverse ideas and cultures (Kistyanto et al., 2021). Exposure to a novel environment can motivate individuals to improve their innovative work behaviour. Diverse environments encourage flexibility in idea generation through unique inputs and divergent thinking (Ng et al., 2012). However, to navigate cultural differences, possessing cultural intelligence (CQ) is crucial (Afsar, Al-Ghazali, Cheema, & Javed, 2020). Low cultural intelligence may lead individuals to withhold knowledge from peers, resulting in reduced idea generation (Bogilović, Černe, & Škerlavaj, 2017).

According to (Ang, 2003), Cultural Intelligence (CQ) refers to an individual's ability to adapt and excel in diverse cultural environments. CQ comprises four key dimensions: metacognitive, cognitive, motivational, and behavioural (Ang et al., 2007). For students, studying abroad can be a thrilling experience that fosters cultural learning and creativity. However, it can also lead to feelings of anxiety and being threatened in unfamiliar surroundings. Some students may cope with this uncertainty by retreating from cultural reasoning and relying on stereotypes to regain comfort and predictability, which can hinder their cognitive flexibility (Klafehn, 2008). Conversely, individuals with higher CQ can better manage the negative impact of intercultural uncertainty (Klafehn, 2008). Notably, CQ is a significant predictor of work outcomes (Afsar, 2020), and its presence is vital for students to overcome challenges in innovative behaviour or performance caused by unfamiliar cultural environments.

Enhancing students' innovative work behaviour during a student exchange program can be challenging due to the intricate nature of innovation (Jong & Hartog, 2010), leading to a complex relationship between Cultural Intelligence (CQ) and innovative work behaviour (Afsaret al, 2020). The author introduces interpersonal trust as the intervening variable in this research to further investigate this relationship. Engaging with a multicultural team or peers during a study abroad experience necessitates interpersonal trust. The diverse values, roles, and goals among team members or students in a host university can reduce understanding and cooperation, affecting learning (Child, 2001). Consequently, students in a multicultural environment might find it challenging to trust one another, as individuals tend to categorize different peers as out-group members rather than familiar in-group members (Turner, 1987). Gaining trust becomes an essential intervening process in diverse teams, significantly influencing their effectiveness (Earley & Mosakowski, 2000). This study examines two components of interpersonal trust: cognitive trust and affective trust (McAllister, 1995).

By investigating the relationship between cultural intelligence and its potential impact on innovative work behaviour, we can gain insights into the significance of cultural intelligence in fostering innovation among individuals. This research aims to determine whether the Indonesian International Student Mobility Awards (IISMA) can be considered a long-term investment in the country's workforce, particularly concerning innovation. The study aims to identify how cultural intelligence influences the innovative work behaviour of international student mobility awardees during the program. Additionally, it seeks to determine whether interpersonal trust is a significant mediating variable between cultural intelligence and the innovative work behaviour of these awardees during the program.

These are the hypotheses derived from the previous elaboration:

H1: Cultural intelligence affects individual students' innovative work behaviour positively.

H2: Cultural intelligence affects interpersonal trust positively.

H3: Interpersonal trust affects individual students' innovative work behaviour positively.

H4: The relationship between cultural intelligence and students' innovative work behaviour is mediated by interpersonal trust.

B. RESEARCH METHODS

An interview is chosen as the preliminary study of this research to identify the existing issue and find the variables that may be related to innovative work behaviour. A preliminary study semi-structured interview was conducted to find the factors that may affect the innovation performance of the IISMA awardees. The interviewee of this study is a sample of the IISMA awardee program. The preliminary study result showed that during the study abroad period, the awardees felt the importance of cultural intelligence in connecting with international students and building interpersonal trust. After they had built their trust with their peers, they became more confident to engage in innovative work behaviour.

Nevertheless, the interviewee stated that pre-departure preparation did not prioritize the development of Cultural Intelligence (CQ). In contrast, intercultural training offers a more comprehensive approach that equips students with a broader concept to understand and interpret their experiences abroad (Paras et al., 2019). After the preliminary interview, the author conducted a literature review to review more profound about the variables. As mentioned in the previous chapter, the hypotheses are developed from the problem identification and literature review. Below is the theoretical framework that this study will examine:

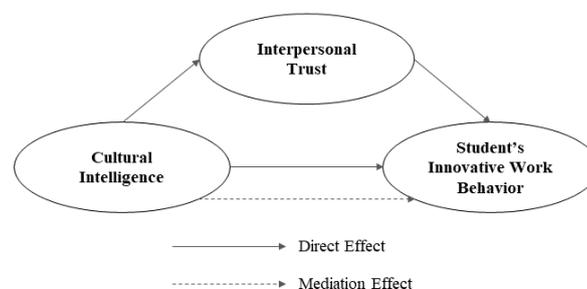


Figure 1. Theoretical Framework

This study conducts a quantitative study utilizing an online questionnaire method. The question list is derived from an (Ang, 2007) study that established cultural intelligence scale consisting of 20 questions that revolve around metacognitive CQ (MC), motivational CQ (MOT), cognitive CQ (COG), and behavioural CQ (BEH). Furthermore, interpersonal trust as the mediating variable is measured through 11 questions from (McAllister, 1995) research that measures affect-based trust (AT) and cognitive-based trust (CT). Lastly, the author will assess innovative work behaviour from the (Jong & Hartog, 2010) questionnaire list that can give insight from these dimensions, namely: idea exploration (IE), idea generation (IG), idea championing (IC) and idea implementation (II). These question lists are measured with a 1–5-point Likert scale that indicates "very disagree" to "very agree" points. To avoid errors, this study also adds controlling variables that comprise age, host university region, home university, degree background (bachelor or vocational) and validating whether the respondents are IISMA grantees that have experienced the program abroad in 2022.

Since the variables of this study are multidimensional, PLS-SEM is used to assess the model's relationship with SmartPLS 4.0 software. The PLS-SEM method appeals to researchers because it enables them to estimate complex models with many constructs, indicator variables, and structural paths without inflicting distributional assumptions on the data (Hair et al., 2019). There are two measurement models in PLS-SEM: reflective and formative (Yamin, 2023). The researcher will use type 2 second-order factor (reflective-formative) for the Cultural Intelligence, Innovative Work Behavior and Interpersonal Trust variables since all of these variables are multidimensional, as elaborated previously. The analysis will consist of four phases: (1) validity and reliability test for the reflective outer model (lower order construct); (2) validity and reliability test for the formative outer model (higher order construct); (3) inner model analysis; (4) measuring quality index (Yamin, 2023; Hair et al., 2019).

C. RESULTS AND ANALYSIS

This research successfully collected data from 302 respondents (sample) out of 1155 grantees of the IISMA program in 2022. The study specifically targeted Generation Z students born between 1996 and 2010 (McKinsey & Company, 2023). The respondents' ages were as follows: 0.9% were 19 years old, 22.8% were 20 years old, 41.4% were 21 years old, 30% were 22 years old, 3.9% were 23 years old, and 0.3% were 24 years old. As all respondents belonged to Generation Z, this research is well-positioned to assess international student mobility for most of the future labour market required for the nation's innovation growth.

Since the IISMA program caters to undergraduate students, it is divided into bachelor's and vocational degree students. Each category offers different options for host universities that align with the characteristics of the respective degrees. The study's respondents were distributed as follows: 66% were pursuing a bachelor's degree (S1), and 34% were in a vocational degree (D3). This study covers all available IISMA host university regions, with the following breakdown: 7% of the respondents were from the America-Canada region, 33% from the Asia region, 9% from the Australia region, 27% from the Europe region, and 24% from the UK-Ireland region. The diversity of Indonesian students pursuing a one-semester international student mobility program to various countries in this study provides a broader scope for analysis.

Lower order construct level (Reflective model)

The suggestion from (Hair et al., 2019) stated that outer loadings must exceed 0.708 to be acceptable. Thus, eight items (COG2, COG4, COG6, BEH1, MC4, MOT1, MOT5, and AT3) are excluded due to loading values below 0.7. After the exclusion, the author recalculates the model. Composite reliability (CR) values between 0.7 and 0.9 and AVE higher than 0.5 are considered acceptable (Hair, Risher, Sarstedt, & Ringle, 2019); thus, the CRs shown in Table 1 prove that all first-order constructs are reliable. All outer loadings of the dimensions after recalculation are well above 0.70, and all AVE measures are more significant than 0.50. This means the constructs explain more than 50 per cent of the indicator's variance, thus confirming that the measures have good convergent validity. Furthermore, Table 2 shows that the discriminant validity of the constructs is established. A recommended HTMT value is below 0.85 or 0.9; if the value exceeds 0.9, it indicates the absence of discriminant validity (Henseler, Ringle, & Sarstedt, 2015). All of the HTMT ratios for the measures are below 0.85, indicating the existence of discriminant validity for all variables. Thus, with all the requirements of validity and reliability approved, the constructs are acceptable for the overall assessment of the structural model.

Table 1. Construct Validity and Reliability

Construct	LF	Mean	SD	CR	AVE
Metacognitive CQ (Ang, et al., 2007)		4.311	0,6943	0,857	0,667
MC1: I am conscious of the cultural knowledge I use when interacting with people from different cultural backgrounds	0,842	4.401	0,599		
MC2: I adjust or plan my cultural knowledge as I interact with people from a culture that is unfamiliar to me	0,771	4.334	0,703		
MC3: I am conscious of the cultural knowledge I apply to cross-cultural interactions	0,835	4.361	0,65		
MC4: I check the accuracy of my cultural knowledge as I interact with people from different cultures	*deleted	4.146	0,825		
Cognitive CQ (Ang, et al., 2007)		3.574	0,9098	0,831	0,622
COG1: I know the legal and economic systems of other cultures	0,768	3.219	0,945		
COG2: I know the rules (e.g. vocabulary, grammar, accent) of other languages	*deleted	3.603	0,95		
COG3: I know the cultural values and religious beliefs of other cultures	0,821	3.974	0,805		
COG4: I know the marriage systems of other cultures	*deleted	3.215	1		
COG5: I know the arts and crafts of other cultures	0,775	3.712	0,902		
COG6: I know the rules for expressing nonverbal behaviours in other cultures	*deleted	3.719	0,836		
Motivational CQ (Ang, et al., 2007)		4.349	0,6644	0,826	0,612
MOT1: I enjoy interacting with people from different cultures,	*deleted	4.689	0,504		
MOT 2: I am confident that I can socialize with locals in a culture that is unfamiliar to me	0,769	4.331	0,712		
MOT 3: I am sure I can deal with the stresses of adjusting to a culture that is new to me	0,806	4.255	0,66		
MOT 4: I enjoy living in cultures that are unfamiliar to me	0,772	4.156	0,758		
MOT5: I am confident that I can get accustomed to the shopping conditions in a different culture	*deleted	4.315	0,688		
Behavioral CQ (Ang, et al., 2007)		4.042	0,8350	0,843	0,572
BEH1: I change my verbal behaviour (e.g. accent, tone) when a cross-cultural interaction requires it	*deleted	4.093	0,927		
BEH 2: I use pause and silence differently to suit different cross-cultural situations	0,736	4.010	0,816		
BEH 3: I vary the rate of my speaking when a cross-cultural situation requires it	0,789	4.033	0,75		
BEH 4: I change my nonverbal behaviour when a cross-cultural situation requires it	0,766	4.139	0,746		
BEH 5: I alter my facial expressions when a cross-cultural interaction requires it	0,748	3.934	0,936		
Affect-based Trust (McAllister, 1995)		3.983	0,9020	0,887	0,798
AT1: We (me and my classmate) can both freely share our ideas, feelings, and hopes	0,904	4.381	0,712		
AT2: I can talk freely to my classmate about difficulties I am having in the class and know that (s)he will want to listen	0,883	4.142	0,855		
AT3: my classmate and I would both feel a sense of loss if one of us was not in the same class and could no longer work or interact in the class together anymore	*deleted	3.427	1		
Cognitive-based Trust (McAllister, 1995)		4.162	0,7650	0,853	0,660
CT1: My classmate approaches his/her task with dedication	0,776	4.142	0,765		
CT2: Knowing my classmate's background, I see no reason to doubt his/her competence to work on the assigned tasks in class	0,866	4.149	0,738		
CT3: I can rely on my classmate to discuss or work on a class-related assignment together to make my job/learning experience easier	0,792	4.195	0,792		
Idea Exploration (Jong & Hartog, 2010)		4.053	0,7440	0,829	0,709

Construct	LF	Mean	SD	CR	AVE
IE1: I pay attention to issues that are not part of my work/duty	0,827	3.738	0,842		
IE2: I wonder how things can be improved	0,856	4.368	0,646		
Idea Generation (Jong & Hartog, 2010)		3.868	0,8063	0,806	0,582
IG1: I search out new working or learning methods and instruments	0,721	4.043	0,862		
IG2: I generate original solutions for problems	0,745	3.702	0,779		
IG3: I find new approaches to execute tasks	0,818	3.858	0,778		
Idea Championing (Jong & Hartog, 2010)		3.770	0,8325	0,879	0,784
IC1: I make my classmates or team members enthusiastic about innovative ideas	0,879	3.652	0,851		
IC2: I attempted to convince people (i.e, classmates, international friends, locals, or teachers) to support an innovative idea	0,892	3.887	0,814		
Idea Implementation (Jong & Hartog, 2010)		4.053	0,7827	0,883	0,715
II1: I introduce innovative ideas for my assignments, projects, or in-class learning practices	0,821	3.858	0,84		
II2: I contribute to the implementation of new ideas	0,892	4.026	0,784		
II3: I put effort into the development of new things (for my project or assignments)	0,822	4.275	0,724		

Sources: research data, 2023

Table 2. HTMT Analysis

	AT	BEH	COG	CT	IC	IE	IG	II	MC	MOT
Affect-based Trust (AT)										
Behavioural (BEH)	0,233									
Cognitive (COG)	0,200	0,493								
Cognitive-based Trust (CT)	0,634	0,343	0,116							
Idea Championing (IC)	0,427	0,412	0,348	0,419						
Idea Exploration (IE)	0,322	0,494	0,464	0,370	0,590					
Idea Generation (IG)	0,355	0,637	0,507	0,333	0,680	0,732				
Idea Implementation (II)	0,321	0,419	0,417	0,379	0,816	0,686	0,741			
Metacognitive (MC)	0,434	0,572	0,440	0,349	0,287	0,368	0,391	0,371		
Motivational (MOT)	0,528	0,533	0,345	0,461	0,464	0,481	0,626	0,563	0,544	

Sources: research data, 2023

Higher order formative construct level

Once the validity and reliability of the lower-order constructs (LOCs) are confirmed, the author focuses on evaluating the higher-order construct (HOC). The variance inflation factor (VIF) level measures how other indicators influence an indicator's variance within the same construct (Thien, Thurasamy, & N, 2014). Table 3 indicates that each lower-order construct (LOC) successfully avoids the issue of multicollinearity, as they all meet the criterion of an ideal VIF value below 3 (Hair, Risher, Sarstedt, & Ringle, 2019).

After confirming the absence of multicollinearity, the author employed the bootstrapping method using 5000 bootstrap samples to assess the significance and relevance of the outer weights. Table 3 presents the findings, indicating that all dimensions' outer weights satisfy the criterion of significance (with p value<0.05) (Yamin, 2023). This validation confirms the higher-order formative construct of all variables. Additionally, the weight of the first-order construct exceeding 0.2 is deemed acceptable as an indicator (Chin, 1998). Moreover, the t-values of all indicator weights exceed 1.96, demonstrating the significance of all first-order constructs to the higher-order construct (Hair, Risher, Sarstedt, & Ringle, 2019).

Furthermore, the outer loadings are greater than 0.50, signifying the significance of the model. Motivational CQ exhibits the highest outer weights and t-value level for cultural intelligence among the lower-order constructs. Moreover, affect-based trust stands out as the highest first-order dimension for the interpersonal trust variable. Lastly, idea generation is most significant for the innovative work behaviour variable.

Table 3. Evaluation of higher-order construct/second-order construct

HOC	LOCs	VIF	Outer Weights	T Statistics	P Values	Outer Loadings
CQ	Cognitive	1,245	0,251	3,022	0,001	0,590
	Behavioural	1,449	0,238	2,493	0,006	0,688
	Metacognitive	1,382	0,234	2,463	0,007	0,668

HOC	LOCs	VIF	Outer Weights	T Statistics	P Values	Outer Loadings
	Motivational	1,294	0,613	8,314	0,000	0,869
IT	Affect-based Trust	1,333	0,625	4,511	0,000	0,889
	Cognitive-based Trust	1,333	0,528	3,585	0,000	0,841
IWB	Idea Championing	1,698	0,222	1,928	0,027	0,744
	Idea Exploration	1,393	0,245	2,476	0,007	0,694
	Idea Generation	1,616	0,424	4,015	0,000	0,844
	Idea Implementation	1,938	0,362	2,660	0,004	0,846

Sources: research data, 2023

Structural model and quality index

To assess the structural model, it is essential to evaluate the collinearity of the inner model. Table 4 presents the inner model VIF for each path, all below 5, indicating the absence of multicollinearity issues (Hair, Risher, Sarstedt, & Ringle, 2019). Subsequently, the author conducts hypothesis testing for the structural model using the bootstrapping method with 5000 bootstrap samples to determine the significance and relevance of the inner model. Since the data in PLS-SEM is not assumed to be normally distributed, traditional parameter significance tests cannot be used to determine the coefficients' significance. Instead, PLS-SEM utilizes a nonparametric bootstrap approach to ascertain the significance of coefficients (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). This approach allows the author to determine whether the hypothesis is satisfied or rejected in this study section.

Table 4. Inner Model VIF

Inner Model Construct	VIF
CQ -> IWB (Cultural intelligence and innovative work behaviour)	1.000
CQ -> IT (Cultural intelligence and interpersonal trust)	1.237
IT -> IWB (Interpersonal trust and innovative work behaviour)	1.237

Sources: research data, 2023

The results of the bootstrapping process are presented in Table 5, which assesses the path coefficients and T-values for hypothesis testing. If the T-value is greater than the critical value for a 5% significance level of 1.96, the hypothesis is accepted due to the significance between the two variables (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). All hypotheses are satisfied as indicated in the table (T-statistics > 1.96, p-value < 0.05). The bootstrapping results also allow for determining mediating effects and effect size. The f-square value provides insight into the effect strength of an exogenous variable on the endogenous variable (Yamin, 2023). According to Hair et al. (2021), the recommended levels of f-square are as follows: 0.02 (low), 0.15 (moderate), and 0.35 (high). The first hypothesis, which examines the relationship between cultural intelligence and innovative work behaviour, demonstrates a high effect size (f-square = 0.353). The second hypothesis, focusing on the relationship between cultural intelligence and interpersonal trust, has a medium effect size (f-square = 0.237). Lastly, the effect size for the relationship between interpersonal trust and innovative work behaviour is small (f-square = 0.027). Table 5 shows that the result of the indirect effect or the relationship between cultural intelligence and innovative behaviour mediated by interpersonal trust is significant. Additionally, to measure the effect size of the mediating variable or the indirect effect, the v effect size can estimate mediation analysis in a more accessible manner (Ogbeibu, Jabbour, Gaskin, Senadjki, & Hughes, 2020). Ogbeibu et al. (2020) stated that the categorization of the result is as follows: 0.01 (low mediation effect), 0.075 (medium mediation effect), and 0.175 (high mediation effect). This study found the effect size of interpersonal trust as the mediating variable between cultural intelligence and innovative work behaviour to be categorized as low (v effect size = 0.004).

Table 5. Hypothesis Testing, Mediation Test, and Effect Size

Hypothesis/Construct	β	T-statistics	P-value	f-square	Interpretation
<i>Direct effect</i>					
H1 CQ -> IWB (Cultural intelligence and innovative work behaviour)	0,526	9,226	0,000	0,353	significant (p<0.05), high effect
H2 CQ -> IT (Cultural intelligence and interpersonal trust)	0,438	8,279	0,000	0,237	significant (p<0.05), medium effect
H3 IT -> IWB (Interpersonal trust and innovative work behaviour)	0,146	2,152	0,016	0,027	significant (p<0.05), low effect
<i>Indirect effect</i>					
H4 CQ -> IT -> IWB (Cultural intelligence and interpersonal trust and innovative work behaviour)	0,064	2,011	0,022		significant (p<0.05), low effect

Sources: research data, 2023

Bootstrapping also yields R-square and Q-square values, displayed in Table 6. The R-square indicates the proportion of variance explained by the structural model for endogenous variables. Firstly, the R-square for interpersonal trust (IT) is 0.192, indicating that cultural intelligence (CQ) accounts for 19.2% of the variance in interpersonal trust, while the remaining percentage is explained by other variables not addressed in this study. Secondly, the R-square for innovative work behaviour (IWB) is 0.366, signifying that cultural intelligence (CQ) and interpersonal trust explain 36.6% of the variance in innovative work behaviour. R-square values of 0.75, 0.5, and 0.25 are considered substantial, moderate, and weak explanatory powers, respectively (Hair, Hult, Ringle, Danks, & Ray, 2021). Therefore, the R-square indicates that interpersonal trust (IT) has a weak model explanatory power, while innovative work behaviour (IWB) has moderate explanatory power.

To assess predictive relevance, the author used PLS Predict to calculate the Q-square metric. The value of Q-square falls into three categories: 0, 0.25, and 0.5, indicating small, medium, and large predictive accuracy, respectively (Hair, Hult, Ringle, Danks, & Ray, 2021). The result of the Q-square for interpersonal trust is 0.167, indicating small predictive accuracy, while for innovative work behaviour (IWB), it is 0.314, signifying medium predictive relevance.

Table 6. Results of R-square and Q-square

Dependent Constructs	Coefficient of determination R ²	Predictive relevance Q ²
IT	0,192	0.167
IWB	0,366	0.314

Sources: research data, 2023

To assess the model fit, the author also performs the SRMR test to determine the acceptability of the research model. An SRMR value below 0.08 indicates an acceptable fit (Hair, Risher, Sarstedt, & Ringle, 2019). In Table 7, the SRMR value for the model in this study is 0.039, indicating a perfect fit for the research model.

Table 7 SRMR value

SRMR	Original sample (O)
Saturated model	0,039
Estimated model	0,039

Sources: research data, 2023

Finally, the author also employs PLS Predict to evaluate the strength of partial least squares (PLS) in predicting a structural equation model. In other words, PLS Predict is a criterion used to assess the model's predictive power both in-sample and out-of-sample (Hair, Hult, Ringle, Danks, & Ray, 2021). According to Shmueli et al. (2016), R-square alone cannot determine whether a model has acceptable predictive power. To do this, the author compares the RMSE (Root Mean Squared Error) values with the LM (Linear Regression Model) values, as shown in Table 8. The model demonstrates a medium predictive power because, according to the table, an equal number of indicators in PLS-SEM analysis result in smaller prediction errors than the LM.

Table 8. PLS Predict value

	PLS-SEM_RMSE	PLS-SEM_MAE	LM_RMSE	LM_MAE
Affect-based Trust	0,931	0,721	0,928	0,717
Cognitive-based Trust	0,942	0,741	0,940	0,733
Idea Championing	0,920	0,727	0,924	0,730
Idea Exploration	0,924	0,745	0,929	0,749
Idea Generation	0,870	0,687	0,857	0,673
Idea Implementation	0,875	0,698	0,879	0,701

Sources: research data, 2023

Discussion

Firstly, cultural intelligence consists of four lower-order constructs or dimensions: cognitive CQ, behavioural CQ, metacognitive CQ, and motivational CQ. According to the results, the IISMA program appears to have the most significant impact on the awardees' motivational CQ (outer weight: 0.613) compared to the other dimension indicators. This could be attributed to the students' excitement to experience new things and interact with different cultures, which may increase their motivation to learn and engage. Furthermore, based on the outer weights, which measure each indicator's importance to the model (Hair, Risher, Sarstedt, & Ringle, 2019) the rankings from second highest to lowest are as follows: cognitive CQ (outer weight: 0.251), behavioural CQ (outer weight: 0.238), and metacognitive CQ (outer weight: 0.234). It is interesting to note that metacognitive CQ is the lowest level, which contrasts with previous findings showing that American and Filipino higher education students have a high level of metacognitive CQ, being consciously aware of others' cultural situations in their

public universities (Silvallana & Suppiah, 2022; Gooden et al., 2017). However, this finding aligns with the study by Gökten & Emil (2019) that shows Erasmus student mobility program participants have the least metacognitive CQ. It is possible that international student mobility programs, such as IISMA or Erasmus, which have a short span of experience in a novel environment, may make it harder to enhance higher-level skills of strategizing and awareness compared to students who have experienced their environment for a longer time, such as those in public universities or long-term study abroad programs.

Secondly, interpersonal trust, as the mediating variable, consists of two dimensions: affect-based trust and cognitive-based trust. The strongest indicator is affect-based trust (outer weight: 0.625), which encompasses an individual's feelings of caring for other students, as explained in McAllister's (1995) study. This finding aligns with Kistyanto et al.'s (2021) findings, which show that Indonesian students who have experienced study abroad programs have higher affect-based trust. In conclusion, IISMA participants tend to excel in emotional investment rather than building trust based on competence with their multicultural environment during a short-term international student mobility program.

Thirdly, as the dependent variable, innovative work behaviour consists of four dimensions: idea championing, idea exploration, idea generation, and idea implementation. Idea generation (outer weight: 0.424) is the most significant indicator of innovative work behaviour. The other indicators are ranked from second highest to lowest significance as follows: idea implementation (outer weight: 0.362), idea exploration (outer weight: 0.245), and lastly, idea championing (outer weight: 0.222). This implies that IISMA awardees demonstrate highly innovative work behaviour by generating solutions with their diverse peers. Idea championing, on the other hand, has the lowest significance towards the innovative work behaviour variable. This could be due to the short-term study abroad program, which may make generating support for ideas from other parties more challenging.

Cultural intelligence positively affects innovative work behaviour.

This study confirms a positive relationship between cultural intelligence (CQ) and students' innovative work behaviour. The findings from Table 5 show a significant correlation between cultural intelligence (CQ) and innovative work behaviour (IWB) with a p-value below 0.05. This result is consistent with Ang et al.'s (2007) study, which highlights how individuals with higher CQ tend to approach new ideas and expand their creativity to innovate. Previous studies with similar variables, such as Afsar et al. (2020) and Kistyanto et al. (2021), found a positive association between CQ and employees' innovative work behaviour and students' innovative behaviour, respectively. In conclusion, educators and governments must support international student mobility students in strengthening their CQ during their study abroad, as it can significantly improve their performance in innovative work behaviour within their study environment. Therefore, the first hypothesis is supported.

Cultural intelligence positively affects interpersonal trust

This study confirms that cultural intelligence (CQ) positively impacts students' interpersonal trust. The results from Table 5 indicate a significant positive correlation between cultural intelligence (CQ) and interpersonal trust (IT) with a p-value below 0.05. This finding is consistent with Chua et al.'s (2012) research, which demonstrates that individuals with higher CQ find connecting with others from different cultural backgrounds easier. High CQ enables students to respect cultural differences (Ang & Dyne, 2007) and better understand multicultural environments, leading to improved adjustments in their thought processes (Afsar, Al-Ghazali, Cheema, & Javed, 2020). Enhancing cultural intelligence during study abroad experiences is crucial for students to effectively connect with peers, teachers, and other individuals from diverse cultures. Therefore, the second hypothesis is supported.

Interpersonal trust positively affects innovative work behaviour.

This study confirms that interpersonal trust positively impacts students' innovative work behaviour. The results from Table 5 indicate a significant positive correlation between interpersonal trust (IT) and innovative work behaviour (IWB) with a p-value below 0.05 and a t-value of 2.152. Trust plays a crucial role in encouraging individuals to collaborate and engage in proactive behaviours to explore innovations, which aligns with the findings of this study (Chen, Yu, Yuan, Lu, & Shen, 2021). Therefore, interpersonal trust contributes to developing innovative work behaviour among international student mobility program students. Thus, the third hypothesis is supported.

The small effect size of interpersonal trust towards innovative work behaviour (IT → IWB, $f\text{-square} = 0.027$) may be attributed to several factors. The respondents in this study came from various host universities with different curricula and courses. As a result, their interactions with other local or international students and their multicultural environment may vary. Some respondents may have courses that require intense discussions or group work with other students, while others may have more individual assignments in certain study courses. As a result, their opportunities to develop innovative behaviour through collaboration with others in the class may vary depending on the course curriculum. A study also suggests that service providers who primarily work on individual tasks may not prioritize trust as a significant factor in fostering innovative behaviour (Johan, 2021).

Interpersonal trust as a mediating variable

Interpersonal trust, acting as a mediating variable, is consistent with previous research, as Afsar et al. (2020) suggest that cultural intelligence can influence innovative work behaviour through interpersonal trust. The results in Table 5 demonstrate a significant indirect effect of cultural intelligence (CQ) on innovative work behaviour (IWB) through interpersonal trust (IT) ($t=2.011, p<0.05$). Interpersonal trust is a partial mediator, as this study also finds a significant direct effect between cultural intelligence and innovative work behaviour. This implies that trustworthiness plays a role in facilitating connections with others and fostering innovation. Cultural intelligence contributes to the development of trust as it enables individuals to understand and harmonize local and global values, enhancing trust (Van Dyne, et al., 2012).

Similarly, Afsar et al. (2020) observed that innovation requires social support, and trust can mitigate the perceived risks associated with innovation. Hence, the fourth hypothesis is supported. However, it is essential to note that this study reveals that interpersonal trust has a low effect as a mediator, as indicated by the value of ν in Table 5 ($\nu = 0.004$). This could be attributed to two reasons. Firstly, as mentioned in the previous hypothesis explanation, the low effect of interpersonal trust towards innovative work behaviour may be influenced by the diverse course structures and interactions among international student mobility program students. Secondly, the short duration of international student mobility programs, such as IISMA, may limit the time available to develop interpersonal trust among the participants fully.

Given the short duration of the program and the temporary nature of the student groups, it becomes challenging for members to have sufficient time to get to know each other, build relationships, and establish cooperation (Borum, 2010). Trust, being a dynamic variable, evolves over time based on individual interactions and behaviours. Consequently, this study observed a low mediation effect due to the program's limited study duration, which may pose difficulties for students in developing interpersonal solid trust with every local or international peer in their multicultural environment. Despite a small effect size, the findings still hold significant meaning in advancing our understanding of the research (Lowry & Gaskin, 2014). In conclusion, interpersonal trust remains a valuable exploration area as it is a significant mediator between cultural intelligence and innovative work behaviour.

D. CONCLUSIONS

This research aims to understand the influence of cultural intelligence on innovative work behaviour mediated by interpersonal trust among students that have experienced international student mobility programs. According to the study findings, the stakeholders related to the program's policy including the program alumni, MoECRT, and the current program grantees, need to elevate their CQ to maximize the awardees' cultural intelligence during the program. This will further elevate their performance because CQ is proven to increase innovative work behaviour directly and is mediated by an interpersonal trust with other international or local students abroad during the program. This study suggests focusing on developing cultural intelligence during pre-departure learning sessions for IISMA awardees. Cross-cultural team pieces of training, problem-based learning, and role-plays can be utilized for this purpose. The research highlights Metacognitive CQ as the least developed aspect among the awardees, providing an opportunity to improve the pre-departure preparation curriculum. To assess the effectiveness of the training, IISMA can implement evaluations and measure the awardees' CQ before and after the program. Collaboration with third-party organizations like PPI, alums, and educational institutions in the host countries can also enhance awardees' CQ. MoECRT can enhance the available course lists for future grantees with more group work and discussions to boost innovative work behaviour and interpersonal trust further. This way, students can improve their performance and engage in innovative work behaviour with their

peers. By creating a conducive environment, students can foster trust with international students in the host university and enhance their performance in innovative work behaviour.

Nevertheless, this study can benefit future research as it shows that interpersonal trust has a weak coefficient determinant and effect size in this study framework. Future research is advised to explore more variables to discover how students can increase their innovative work behaviour to a better understanding. Furthermore, more insights regarding the effectiveness of this program can be more objective by examining the student's academic performance and career path.

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