



Social Intelligence and Cultural Intelligence as Predictors of National Identity among Public University Students of Ethiopia

Dawit Demlie Messay¹ & Tamirie Andualem Adal¹

¹ School of Psychology, College of Education and Behavioral Studies, Addis Ababa University, Ethiopia

Received 05.08.2024; Received revised 09.06.2025; Accepted 21.06.2025;
Available online 15.08.2025

This study aimed to examine the predictive abilities of social intelligence (SI) and cultural intelligence (CQ) in relation to national identity (NI). We assessed the relationships among these constructs and their predictive power for NI among students at Ethiopian public universities. A total of 441 students were randomly selected from four universities to participate in the study. We used adapted and validated instruments to collect the data. We used the Pearson correlation to explore the strength and existence of linear relationships between the variables prior to testing the predictive model. We performed sequential multiple linear regression to determine the proportion of variance in the outcome variable explained by the independent variables. We also evaluated the degree of prediction to the criterion variable made by the key predictor variables (SI and CQ), while controlling for demographic variables. Overall, the model emerged as a significant predictor of national identity. Cultural intelligence possessed greater predictive power than SI. The study introduces a new framework of inquiry, highlighting the importance of SI and CQ in relation to NI. We recommend that researchers and stakeholders consider these constructs to enhance understanding in social cognitive studies and to promote togetherness and peaceful coexistence.

Keywords: Social identity, national identity, social intelligence, cultural intelligence, Ethiopian public university students

Address of correspondence: Correspondence regarding this article should be directed to Dawit Demlie Messay, School of Psychology, College of Education and Behavioral Studies, Addis Ababa University, Ethiopia
E-mail: dawit.demlie@aau.edu.et or dawitd344@gmail.com

© 2025 Messay & Adal, published by Sciendo

This work is licensed under the [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

Introduction

The concept of identity began as a topic in traditional philosophy and logic, and Freud later incorporated it into psychological theory. Building on Freud's work, Erikson proposed that 'identity' reflects either a clear or ambiguous answer to the question 'Who am I?' according to Erikson, identity is not only an individual aspect but also a collective and social one. Identity is the difference, character, and sense of belonging found in interpersonal interactions and interactions between groups (Erikson, 1994). It develops from self-perceptions that arise through the reflective process of categorizing oneself or identifying with specific groups or roles (Stets & Burke, 2000).

National identity has been one of the debatable issues in academic circles with the development of modern nationalism. There seem to be challenges to elusiveness in defining it (Assefa et al., 1996; Gudina, 2003). There have been debates over the distinction between "real" and "imagined" perspectives on nations (Gellner, 1983). However, scholars, on the other hand, argued that this is too much of a burden for one conceptual term given the vast array of different approaches to national identity (e.g.,

Brubaker & Cooper, 2000). In addition to the conceptual debate, the role of national affiliation in identity construction has been challenged by postmodern accounts. Proponents of this view suggest that globalization and transnationalization are undermining the centrality of nations. They argue that alternative and localized sources of identity are becoming increasingly significant (e.g., Hedetoft & Hjort, 2002; Herrmann et al., 2004).

Despite the enduring debates over what a nation or national group or national identity actually is and how it is adequately defined, many social psychology scholars have argued that identification with a nation precedes, in principle, certain qualities and characteristics. The social identity theory (SIT) provides adequate social psychological explanations of these characteristics. The theory gives particular importance to the social categorization concept in understanding identification processes with groups and social categories. Social categorization is defined as a process whereby stimuli from the outside world are organized into comprehensible information units (Abrams & Hogg, 1990). It is a cognitive process that involves the unification of objects and social events in groups corresponding to an individual's actions, intentions, values,

and belief system (Tajfel & Forgas, 2000). In the formation of social categories, values play an important role in their preservation because they are an interpretation framework for social environment stimuli and allow the perceptions of similitude and differences among social categories to be established and emphasized (Abrams & Hogg, 1990; Fiske & Taylor, 2007; Tajfel & Forgas, 2000).

National identity, from the social psychology viewpoint, therefore, is considered one of the multiple forms of social identity that are created by the social psychological processes of individuals over time. According to Tajfel and Turner (1986), national identity is based on an individual's perceived membership in a nation or nation-state. It is a multidimensional construct that includes cognitive, affective, and evaluative components related to one's country. The prominent studies that have been mentioned as most useful for understanding the nature of human attachment to a nation and to see groups extendedly as a nation are Tajfel's studies (Nigbur & Cirinnella, 2007). Consequently, understanding national identity from the social psychological perspective implies social categorization processes, for example, understanding the self as belonging to and being constituted by some socially defined category (Hogg & Reid, 2006). Hence, they agreed upon views of identity as a multiple and constantly renegotiated subjective relation to a national group (Brubaker & Cooper, 2000).

Ethiopia is located in the Horn of Africa, with an estimated population of over 110 million. It is the second most populous country in Africa (World Bank, 2021). It is a diverse country with over 80 different ethnicities and nationalities; each has its own distinct language, culture, and traditions. Finneran (2003) reported that the issue of national identity in Ethiopia has been shaped at many levels in the past. He stated that self-confidence, nationwide pride in the very localized glories of an Aksumite past, a strong ecclesiastical fabric, historiographical, ethnic, and linguistic elements, and a small, though ultimately traumatic, brush with the colonial experience have conspired to shape a very unique view of Ethiopian heritage.

The terms "nation" and "nationality" in the current context of Ethiopia refer to the different ethnic groups that make up the country's federal state. One of the most commonly discussed aspects of the current system by elites and politicians is that it officially acknowledges multiculturalism and respects the liberal values of diversity, tolerance, and recognition of minority groups. Nonetheless, its practical application is criticized for contributing to the negative results of ethnic conflicts and social crises among groups. Fisseha (2016) reported that Ethiopia's ethnic federalism has brought about ethnic conflicts and social unrest among different ethnic groups. The system has exacerbated the conflict and divisions that previously existed because students primarily learn about their locality and ethnicity instead of their Ethiopian national identity (Dessalegn & Meherat, 2004). Considering this situation, people say that the greater Ethiopian national identity is deteriorating.

Social psychology researchers, however, have argued that individuals' relationships in a group should not be considered expressions of identity, stating that group identification is sometimes different from members' relationships (e.g., Huddy et al., 2021; Karasawa, 1991), although ingroup ties and positive relationships can be important factors for social identity categorizations. Moreover, scholars have argued that individuals can have multiple forms of identities, preferring to maintain exclusive

ethnic, national, or both identities (Verkuyten & Martinovic, 2012), although they are not equally strong (Simon & Grabow, 2010; Simon & Ruhs, 2008). The general notion is that, because members enter into conflict, they do not show the absence or weakness of national identity. This is one of the ideas that fueled the present research. Ethiopian national identity is presented as a "weak" identity because of the conflicts and clashes seen in universities. People from this camp claim that essential factors that help maintain a strong national identity have diminished as students lack the elemental behavioral characteristics of collective identities, such as reverence, understanding, tolerance, appreciation, recognition, and adaptability, which are essential for peaceful coexistence. This study aims to test this deliberation empirically and shed some light on the debate over Ethiopian national identity, but it aims to examine its association with the social and cultural intelligence constructs that may be worthwhile in this area, contributing to theoretical, empirical, and practical accounts.

Individuals inherently need to adjust themselves to others in the group with which they identify. However, such adjustments and the subsequent maintenance of positive social relations in a diversified nation are not always easy, as they include meeting differences and conflicting views. This substantially requires a specific type of intelligence called social intelligence—the ability to effectively manage personal and societal situations by identifying commonalities and developing realistic but flexible coping strategies. A comprehensive definition of social intelligence (SI) given by Moss and Hunt (1927, p.108, cited in Lacanlale, 2013) reads as "the ability to get along with others" (p. 263). Additionally, Honeywill (2015) described social intelligence as "the capacity to navigate complex social relationships and environments" (p. 6). In support of our assumption of the present study, Lacanlale (2013) noted the following:

Man needs to become adaptive and flexible in dealing with others to develop healthy and smooth relationships. He needs to develop and possess the capacity and ability to understand and manage other people. He needs to know how to operate and handle various situations, and he should have an idea about the social environment in which he is interacting. To respond to these needs, man's social intelligence is deemed important (p. 263).

Compared with other segments of the population, university students tend to have higher levels of SI (e.g., Alkhaldi & Alkhutaba, 2018; Bhat & Khandai, 2016; Omogbai & Jesuorobo, 2024). The reason may be that the university environment exposes students to different social encounters by allowing them to meet from diverse backgrounds, which helps develop the capabilities of social information processing, social skills, and social awareness, which are components of social intelligence (Silvera et al., 2001).

Because national identity is the feeling of unity, cohesion, collective belonging to a particular nation, and a sense of commitment and loyalty to a nation (Smith, 1991), in the current study, we hypothesized that SI is an important factor for national identity based on the aforementioned underlying elements of the construct (i.e., adaptability, flexibility, social skill, social awareness). This is supported by the triarchic theory of intelligence, which provides a comprehensive framework for understanding human behavior and actions through the lens of three distinct facets: analytical, practical, and creative intelligence (Sternberg, 1988). Analytical intelligence embodies the ability to process information, reason, and solve problems, reflecting

Social Intelligence and Cultural Intelligence as Predictors of National Identity

the traditional academic prowess commonly measured by standardized tests. In contrast, practical intelligence pertains to the capacity to navigate real-world situations effectively, demonstrating savvy to handle everyday challenges. Meanwhile, creative intelligence encapsulates the ability to think outside the box, innovate, and approach problems with originality and fresh ideas. The theory emphasizes that individuals exhibit varying strengths in these domains, which collectively shape their adaptive responses in diverse contexts.

Cultural intelligence (CQ), on the other hand, is the ability to grasp, reason, and behave effectively in situations characterized by cultural diversity (Ang et al. 2007). These capabilities of individuals include the acceptance of a certain degree of cross-cultural confusion, the suspension of a judgment of cultural values, and a desire to understand cultural differences (Brislin et al., 2006). It also includes individuals' ability to adapt and thrive in a different environment that they did not encounter. In this sense, groups or nations that comprise people with higher levels of CQ can function effectively because there can be a better understanding among members, celebrating commonalities and respecting differences. Earley and Ang (2003) revealed that CQ is a multidimensional construct that comprises metacognitive CQ, cognitive CQ, motivational CQ, and behavioral CQ. These dimensions, which differ qualitatively, function effectively in culturally diverse settings and manage differences successfully.

This study assumes that CQ is another important construct for predicting national identity in this research because it involves the ability to interact and behave effectively among people who are culturally different in a nation. It influences the subsequent sense of collective identity that people (or members) can have or ascribe to. In other words, groups that comprise people with higher levels of CQ can function effectively because there will be a better understanding of each other, celebrating commonalities and respecting differences. Idrus (2015) reported that students with high CQ faced fewer problems in cross-cultural adjustments and were able to cope with problems. An understanding of one's own culture and others' culture under a nation can shape the sense and meaning one has of his/her national identity. An individual's curiosity and motivation to know and understand others' cultures in a diversified nation can foster a more inclusive and strong national identity, as there will be appreciation among members. This can enhance the sense of belonging and connection to one's own and other cultural groups in the nation. We hypothesized that CQ is an important factor in national identity because it is the ability to adapt and thrive in a different environment. Studies have shown that university students exhibit higher levels of CQ than others do (e.g., Senel, 2020; Sousa, et al., 2023; Teneta-Skwiercz, 2022). This can be attributed to the fact that diversity in universities is considerably high, and thus, students can benefit from it to develop the capability of the construct. In particular, in the present study population, Ethiopian public university settings are diverse and include students from different ethnic and cultural groups across the country.

In summary, because smooth interactions, understanding, respect, acceptance, and adaptability are core elements of collective identity, an examination of the ability of the two intelligence constructs to predict national identity is justifiable. It can have theoretical and empirical significance for other studies as the primary literature is deficient in presenting adequate explanations of the relationships among the constructs. We believe it could help

shed some light on the elucidation of social cognitive studies and further investigations in this area. The findings can be taken as an integral part of the knowledge domain of social identity, adding a body of literature to the field.

Most recent works have focused on the microlevels of collective identities. Such studies are useful for understanding social identities but cannot be taken as trouble-free when connected to national identity investigations. Therefore, considering the significance of national identity, as discussed above, the study would provide important empirical insight into other researchers for further investigations on the constructs.

It is deemed to have practical importance for peaceful coexistence in the Ethiopian public university setting, which is a place where the diverse nature of the country is vividly visible. According to the Ministry of Education of Ethiopia, higher education institutions (HEIs) continue to be the center of diversity in students' religion, language, and ethnicity (MoE, 2011). Hence, interventions in the curriculum, interregional placement and intercultural exchange opportunities, faculty development centers and programs, and positive youth development policy can be considered by key stakeholders as the study reveals the importance of SI and CQ for national identity. As Semela (2012) noted, Ethiopia, as a multicultural state, "should be able to avert mutual mistrust and eventual intergroup conflict to survive and emerge viable" (p. 324). The study, therefore, tests the following hypotheses:

Hypothesis 1: There is a relationship between national identity, social intelligence, and cultural intelligence among undergraduate students at public universities.

Hypothesis 2: Social intelligence and cultural intelligence predict national identity in undergraduate students at public universities.

Hypothesis 3: Social intelligence and cultural intelligence predict national identity while controlling for demographic variables (age, sex, family socioeconomic background, original area of residence) among participants.

Research Methods

Research Design

The study was a nonexperimental study in which a cross-sectional research design was employed. We aimed to test if national identity (NI) is influenced by social intelligence (SI) and cultural intelligence (CQ) by utilizing data from young public university students. Consequently, we employed a quantitative research method. The predictor variables are SI and CQ, and the criterion variable is NI. The predictor variable SI has three factors, whereas CQ has four factors. The outcome variable has two factors.

Participants and Procedures

Four hundred forty-one senior undergraduate students participated in the current study. We employed the ratio of observations to estimated parameters (N:q) as a guide to determine the sample size; N = the total number of observations, and q = the number of parameters in the model. Kline (2015) recommended that the N:q ratio should be 20 to 1. Accordingly, for our study, which featured 20 observed variables, a minimum of 400 sample participants ($20 \times 20 = 400$) was needed. With a likelihood of a nonresponse rate of 15%, our sample size was 460 ($60 + 400 = 460$). Our reason for the extra cases is qualitative justification; it is for better generalization and precision by avoiding gradual sample size deterioration because of potential nonreturns, many more outliers, invalid values,

missing values, etc. When this total sample size is divided into four universities, it will be 115 ($n = 115$). We allotted this number to each. After we obtained their consent, by employing the lottery method of random sampling, we drew the sample from the students who were in their third year and above in their studies in the regular programs of Adama Science and Technology, Dire Dawa, Wollo and Wolkite universities of Ethiopia. From the equivalent number of distributed questionnaires, we received 444, which were appropriately filled out. We finally conducted the study on a sample of 441 students after three cases with extreme missing values were excluded.

Instruments

In this study, we utilized standardized self-evaluating instruments tailored to measure specific constructs by adapting them to the Ethiopian context, translating them into the Amharic language, and validating them through a pilot test (Demlie & Andualem, 2024; Demlie & Andualem, in press; Messay & Adal, 2025). For the adaptation process, we enlisted the expertise of eight professionals in psychology along with a social anthropologist with a historical background. Additionally, we engaged four bilingual linguistics experts for the translation task. To ensure consistency, the researchers conducted a back translation. The instruments were subjected to a content validity assessment, and a supervisor reviewed and approved the final versions. To evaluate item retention based on content validity ratio, we applied Lawshe's (1975) methodology. The content validity ratio (CVR) for each item related to the study variables ranged from .75 to 1. The content validity indices (CVIs) for the items pertaining to the constructs of NI, SI, and CQ were .91, .94, and .95, respectively.

The questionnaire consisted of two sections: the first section gathered demographic information from participants, while the second section included items designed to measure their NI, SI, and CQ.

National Identity

One of the most commonly utilized instruments for measuring collective identities is the Multigroup Ethnic Identity Measure (MEIM), developed by Phinney in 1992. Since its inception, this tool has undergone revisions and has been tested in various settings, demonstrating reliability ($\alpha > .80$) across a diverse range of groups and ages (e.g., Roberts et al., 1999; Phinney & Ong, 2007; Yoon, 2011). Due to its versatility and openness in assessing social identities, the MEIM has often been adapted to evaluate national identity (e.g., Maehler et al., 2019); gender and religious identities (e.g., Ashdown et al., 2014); as well as racial, religious, and national identities (e.g., Gaines et al., 2013). The 12-item scale, as outlined by Roberts et al. in 1999, consists of two factors: identity exploration, comprising five items, and identity commitment, comprising seven items. In the current study, the original MEIM was first adapted by the researchers, considering social identity theory, and subsequently presented to experts for cross-adaptation, translation, and customization to the Ethiopian context, as described before. Experts proposed the addition of three items to effectively capture the construct within this context. The tool developers also recommended item addition and deduction as necessary. According to Phinney and Ong (2007), the instrument "can be complemented by additional measures" (p. 28). Due to the inappropriateness of two items, the adapted Amharic version of the MEIM, which now consists of 13 validated items using a 5-point Likert scale ranging from 1 (strongly

disagree) to strongly agree), was utilized in this study. The reliability coefficient for this version was found to be .90, while the Cronbach's alpha for the exploration and commitment subscales were .90 and .92, respectively (Demlie & Andualem, in press).

Social Intelligence

We used the Tromso Social Intelligence Scale (TSIS), a multifaceted social intelligence measure developed and validated by Silvera et al. (2001). The TSIS is a 7-point Likert scale ranging from 1 (= strongly disagree) to 7 (= strongly agree). The higher the score is, the higher the level of social intelligence. The original TSIS consists of 21 items and measures three social intelligence dimensions—social information processing (SIP), social skills (SSs), and social awareness (SA)—each of which utilizes seven items. The measure has been translated into different languages in many countries and is subject to validation tests, and its psychometric qualities have been found to range from adequate to excellent (e.g., Gini, 2006; Grieve & Mahar, 2013). Among the 21 items included in the original scale, 19 items were found to be relevant and appropriate (culturally universal) for measuring SI in the Ethiopian context of Amharic language-speaking students. The two items that were limited to the original measurement model but lacked practical relevance or similarity in psychological meaning to the context of the present study were deleted. Therefore, we used the validated Amharic language version of the Tromso Social Intelligence Scale (TSIS), which consists of 19 items for the present study (Demlie & Andualem, 2024). The Cronbach's alpha coefficient was found to be .94. For the SI subscales of social information processing, social skills, and social awareness, Cronbach's alpha were found to be .90, .94, and .88 respectively.

Cultural Intelligence

Ang et al. (2007) developed the Cultural Intelligence Scale (CQS) and validated it over time and across various samples in different countries. Subsequent studies have corroborated the psychometric properties, factor structure, validity, and generalizability of the CQS. The scale comprises 20 items that address the four dimensions of cultural intelligence (CQ): metacognitive CQ, cognitive CQ, motivational CQ, and behavioral CQ. Specifically, there are four items for metacognitive CQ ($\alpha = .76$), six items for cognitive CQ ($\alpha = .84$), five items for behavioral CQ ($\alpha = .83$), and five items for motivational CQ ($\alpha = .76$). All items are rated on a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The English version of the CQS was subsequently translated into Amharic. For this study, we employed the adapted and validated Amharic-language version of the CQS, which demonstrated a reliability of .92. The subscales for metacognitive CQ, cognitive CQ, motivational CQ, and behavioral CQ yielded Cronbach's alpha values of .81, .89, .88, and .89, respectively.

Data Analysis

We performed data screening and checked assumptions at the univariate, bivariate, and multivariate levels of statistical analysis. Initial assessments included evaluating normality, linearity, homoscedasticity, singularity, multicollinearity, and identifying significant outliers. To address a small number of missing values likely resulting from random error, we employed a multiple imputation method. We utilized Pearson correlation to investigate the strength of relationships between variables and to ascertain

Social Intelligence and Cultural Intelligence as Predictors of National Identity

the existence of linear relationships prior to testing the predictive model. Sequential multiple linear regression was conducted to determine the proportion of variance in the dependent variable, NI, explained by the independent variables, SI and CQ. We assessed the degree of prediction to the criterion variable made by the key predictor variables (SI and CQ) after controlling for age, sex, family socioeconomic background, and original area of residence. Additionally, we applied dummy coding to evaluate the contributions of the categorical predictor variables within the regression model. Data analysis was carried out using IBM SPSS version 25 and AMOS 23, utilizing maximum likelihood estimation for this purpose.

Results

Participants' Demographic Information and Descriptive Statistics

The data were obtained from 441 respondents; 295 males (66.9%) and 138 females (31.3%) participated. Eight of the participants did not describe their sex. The mean age of the participants was 22 years ($SD = 1.255$). Thirty-one participants did not state their age. Two hundred sixty participants (59%) were from urban areas, and 158 (35.8%) were from rural areas of Ethiopia. Twenty-three participants

did not mention where they were originally from for the urban–rural question. Concerning family socioeconomic background, 342 (77.6%) were from medium socioeconomic backgrounds, 42 (9.5%) were from low socioeconomic backgrounds, and 35 (7.9%) were from high socioeconomic backgrounds. Twenty-two participants did not describe their family socioeconomic background.

We examined the descriptive statistics and reliability coefficients measured by Cronbach's alpha of the national identity, social intelligence, and cultural intelligence measures. The maximum and minimum values demonstrated that sufficient ranges of diversity and variability in response were obtained (see Table 1). The results of the internal consistency of the three constructs were found to be high (i.e., $\geq .90$). Table 1 also depicts the data distribution, presenting the 5% trimmed mean, skewness, and kurtosis values. The difference between the mean and the trimmed mean values of each variable was not large. This implies that the few outlying cases in the dataset were not too far from the rest. The skewness and kurtosis values indicated that the data were normally distributed. According to Bulmer (1979), a skewness value between -1 and +1 is considered excellent, indicating a near-symmetric distribution. Kurtosis values between -7 and +7 of a dataset are considered normally distributed (Hair et al., 2010).

Table 1. Descriptive Statistics, Distribution and Reliability of National Identity, Social and Cultural Intelligence (n = 441)

Variables	No. of items	Minimum	Maximum	Skewness	Kurtosis	α
NI	13	22	65	-.946	.164	.91
SI	19	47	133	-.447	-.583	.94
CQ	20	51	139	-.530	-.423	.93

NI = national identity; SI = social intelligence; CQ = cultural intelligence; α = Cronbach's alpha value; 5% Trimmed Mean of NI = 52.43, SI = 99.74, CQ = 102.48.

Table 2. Variable Means, Standard deviations, and Pearson Correlation Coefficients

Variable	Mean	SD	NI	SI	CQ
National Identity (NI)	51.84	9.40	1		
Social Intelligence (SI)	99.13	18.97	.49**	1	
Cultural Intelligence (CQ)	101.88	18.86	.58**	.72**	1

** The correlation is significant at the 0.01 level (2-tailed), N = 441.

Relationships between National Identity and Social and Cultural Intelligence

We examined the relationships between national identity and social and cultural intelligence, which are reported below. Table 2 presents the results of the Pearson correlation coefficients with the variables' means and standard deviations. We found a significant positive correlation among students' national identity, social intelligence, and cultural intelligence. Students' social

intelligence was positively correlated with their national identity ($r = .49$, $p < 0.01$), suggesting that students with higher social intelligence also had a stronger Ethiopian national identity. Similarly, students' cultural intelligence was positively correlated with their national identity ($r = .58$, $p < 0.01$), indicating that students with greater cultural intelligence had a more pronounced Ethiopian national identity. Furthermore, students' social intelligence was highly positively correlated with their cultural intelligence

($r = .72$, $p < 0.01$), meaning that more socially intelligent students were also more culturally intelligent. Kutner et al. (2005) noted "The fact that some or all predictor variables are correlated among themselves does not, in general, inhibit our ability to obtain a good fit nor does it tend to affect inferences about mean responses or predictions of observations" (p. 289).

In conclusion, no variable was negatively related to another variable. Concerning the strength of the

relationships, medium and high correlations between variables were found. Except for the correlation between social intelligence and national identity, which was found at the highest edge of the medium level, the correlations between national identity and cultural intelligence and between social intelligence and cultural intelligence were found to be high. In this context, different authors suggest different interpretations. Cohen (1988, p. 79–81) suggested that a correlation is small ($r = .10$ to 0.29), medium ($r = .30$ to 0.49), or large ($r = .50$ to 1.0).

Table 3. Regression Statistics

Variables	R^2		F	Sig. F change				Tolerance	VIF
	R^2	Change			β	t	Sig.		
Model 1	.024	.024	1.903	.093					
Sex					-.104	-2.021	.044	.927	1.079
Age					.096	1.845	.066	.912	1.096
Residence: Urban					-.037	-.689	.491	.875	1.143
SoE background: High					.103	1.555	.121	.568	1.761
SoE background: Medium					.111	1.681	.094	.566	1.768
Model 2	.256	.233	22.623	***					
Sex					-.062	-1.363	.174	.920	1.087
Age					.115	2.517	.012	.911	1.097
Residence: Urban					-.045	-.967	.334	.875	1.143
SoE background: High					.050	.872	.348	.564	1.773
SoE background: Medium					.087	1.509	.132	.565	1.770
Social Intelligence (SI)					.487	11.103	***	.979	1.021
Model 3	.352	.096	30.496	***					
Sex					-.058	-1.363	.174	.920	1.087
Age					.090	2.110	*	.906	1.104
Residence: Urban					-.028	-.641	.522	.872	1.146
SoE background: High					.028	.521	.603	.562	1.778
SoE background: Medium					.063	1.167	.244	.563	1.776
Social Intelligence (SI)					.164	2.785	**	.474	2.111
Cultural Intelligence (CQ)					.448	7.620	***	.477	2.098

Note. Dependent variable: National identity. *prediction is significant at .05. **prediction is significant at .01. ***prediction is significant at .000 (2-tailed). SoE = socioeconomic; VIF = variance inflation factor.

Contributions of Social and Cultural Intelligence Variables to the Prediction of National Identity

We used sequential regression to address the amount of variance in the independent variables in the prediction of the outcome variable. Before running the analysis, we checked the assumption of multiple linear regression. The data met the assumptions of sufficient sample size, normality, singularity, linearity, homoscedasticity, no multicollinearity, significant outliers, and residual independence. The dependent variable was quantitative and was measured via an interval or ratio scale. Upon examining the scatter plot, we found a positive linear relationship between the SI, CQ, and NI, indicating that there were no significant bivariate outliers.

The strong correlation observed, particularly between SI and CQ, should not raise concerns regarding multicollinearity. The tolerance and variance inflation factor (VIF) values indicate that the correlation is within a healthy range. Specifically, a tolerance value of less than .1 suggests the potential presence of multicollinearity (Fox, 1991). Additionally, a VIF greater than 5 signals a concern, while a VIF exceeding 10 indicates a serious collinearity issue (e.g., Menard, 2002). In this study, the tolerance value for the SI was .474, and for the CQ, it was .477, both of which exceed .1. The VIF values for SI and CQ were found to be 2.111 and 2.098, respectively. Hence, multicollinearity did not pose a concern impacting the overall predictive fit.

Social Intelligence and Cultural Intelligence as Predictors of National Identity

We evaluated a model that included demographic variables, as well as SI and CQ, to predict national identity. Our analysis examined the predictive power of the variables for national identity while controlling for the potential confounding effects among them. Table 3 provides a summary of the three models. Model 1 refers to those variables entered in the initial block, which encompasses sex, age, original area of residence, and background associated with socio-economic status (SoE). In contrast, Model 2 builds upon this foundation by integrating an additional variable, social intelligence (SI), thus comprising all variables from block 1 and block 2 (i.e., sex, age, original area of residence, SoE background, and SI). Lastly, Model 3 comprises all variables in block 1, block 2, and cultural intelligence (CQ).

The results reveal that Model 1 accounted for 2.4% of the variance in national identity (NI). However, when SI was added in Model 2, the explained variance significantly increased to 25.6%. Notably, this is over and above the variance accounted for by the demographic variables—sex, age, original area of residence, and SoE background—that were controlled for. This marked a statistically significant contribution ($p < .001$).

Moving to Model 3, which includes all the variables of inquiry, the explained variance reached 35.2%. Here, CQ emerged as a critical factor, increasing the R^2 by 9.6%, after controlling for the variables outlined in Model 2 (sex, age, original area of residence, SoE background, and SI). This finding was also a statistically significant increase over and above that accounted for by sex, age, original area of residence, SoE background, and SI ($p < .001$).

To delve deeper into how each variable influenced the final prediction, we examined the independent variables using the comprehensive results from Model 3. The analysis highlighted that three variables—age, social intelligence, and cultural intelligence—significantly contributed to the prediction of national identity ($p < .05$). Cultural intelligence stood out with the highest unique contribution ($\beta = .448$, $t = 7.620$, $p < .001$), showing a strong influence. While social intelligence had the second highest unique contribution ($\beta = .164$, $t = 2.785$, $p < .01$), age had the least significant contribution ($\beta = .090$, $t = 2.110$, $p < .05$) to the prediction of national identity. The remaining variables in the equation did not yield significant contributions.

In summary, the overall model demonstrated a high level of significance, revealed by $F(7, 393) = 58.071$, $p < .001$. Nevertheless, it is important to note that the demographic variables, while essential for context, did not significantly contribute to the prediction of national identity, as indicated by $F(5, 395) = 1.903$, $p > .05$.

Discussion

The study examined whether social intelligence (SI) and cultural intelligence (CQ) serve as predictors of national identity (NI) in the university setting of Ethiopia, which targets senior undergraduate students. We used adapted instruments that were validated in the Ethiopian context (e.g., Demlie & Andualem, 2024; Demlie & Andualem, in press; Messay & Adal, 2025). The results are discussed below based on the hypotheses presented in the introduction section.

The first hypothesis was about the relationships among NI, SI, and CQ. We found a significant positive correlation among students' NI, SI, and CQ. This means that students with stronger Ethiopian national identities had greater SI. Similarly, students with higher CQ had a more pronounced

Ethiopian national identity. Students' SI was also highly positively correlated with their CQ; hence, students who were more socially intelligent were also more culturally intelligent.

Research examining the direct connections among NI, SI, and CQ remains scarce in the existing literature. However, studies investigating various subtypes of social identities and their relation to SI have demonstrated consistently positive correlations (e.g., Haslam et al., 2022). This phenomenon may stem from the fact that individuals with a stronger sense of SI possess a heightened ability to understand others' perspectives and align with their own feelings, beliefs, and attitudes. Such understanding can foster a more inclusive, cohesive, tolerant, and accepting national identity, as participants can relate to and appreciate the diverse ideas, practices, and experiences of the nation's members, as per the social identity theory. This notion, correspondingly, is supported by empirical evidence, indicating that a strong national identity enhances individuals' ability to adapt to their environment by fulfilling various motives and identity functions (Simon, 2004; Vignoles et al., 2006). Students who can empathize with others and respond appropriately are more likely to build healthy relationships with their fellow citizens, thereby reinforcing a robust national identity. They are adept at forming new relationships, expanding their networks, maintaining existing ones, and effectively resolving interpersonal conflicts (Dodge & Pettit, 2003). These abilities significantly influence their exploration of shared values and the commonalities that emerge. Therefore, fostering (and maintaining) collective identities in diverse nations, such as Ethiopia, can indeed be achieved.

Self-definition within a specific social group is explored through social identity theory, which establishes a link between an individual's cognitive and perceptual processes and the behaviors of social groups. Motivational and emotional factors are significant contributors to this dynamic (Tajfel & Turner, 1979). The affective and cognitive processes individuals engage in regarding their social environment are crucial in shaping and sustaining the identities of social groups.

Similarly, the triarchic theory of intelligence seeks to elucidate the concept of intelligence in relation to an individual's internal and external worlds (Sternberg, 1988). This theory comprises three subtheories, each relating to a specific facet of intelligence. The componential subtheory corresponds to analytical intelligence, which encompasses the ability to solve problems; the contextual subtheory pertains to practical intelligence, referring to the capacity to effectively navigate one's environment; and the experiential subtheory relates to creative intelligence, or the ability to address novel situations and challenges (Sternberg, 1985, 1988). According to Sternberg, intelligent thought is not arbitrary or random; rather, it is purposefully directed toward behavioral goals that are significant to the individual's life, including adaptation to the environment and the selection and shaping of that environment (Gross, 1996).

The strong positive relationship between NI and CQ identified in the current study is supported both theoretically and empirically. For instance, social identity theory posits that the effort to share others' values and perspectives fosters a sense of "we-ness" grounded in "the shared attributes around which group members coalesce" (Cerulo, 1997, p. 386). Cultural intelligence embodies these critical elements of social identity, emphasizing strong identification as a key attribute, as previously discussed. Developing the three

facets of intelligence enhances an individual's ability to engage effectively in group interactions and to sustain group identity.

Research conducted in culturally diverse and heterogeneous nations has revealed that these contexts often exhibit higher levels of nationalism compared to more homogeneous states (e.g., Robinson, 2009). This finding challenges the common assumption that a more homogeneous population facilitates a stronger national identity. One possible explanation for the heightened levels of nationalism in heterogeneous nations is that a significant number of individuals possess elevated CQ, leading to greater cohesion and identification within the group. Given the positive correlation between CQ and cross-cultural adjustments (e.g., Subramaniam et al., 2011), people residing in multicultural states may develop higher CQ, which is essential for fostering a strong national identity.

The strong correlation between social intelligence (SI) and cultural intelligence (CQ) can be attributed to their intrinsic relationship as interconnected constructs of intelligence. Numerous studies have illuminated this significant link, such as the research conducted by SuB and Beauducel (2005) and Crowne (2009), which underscore the common underlying elements that enable individuals to effectively comprehend and navigate various social contexts. These studies reveal how both forms of intelligence contribute to our ability to interact harmoniously within diverse environments. However, it is crucial to acknowledge that, despite their interrelationship, SI and CQ are distinct constructs that offer unique insights into human behavior and social dynamics (e.g., Crowne, 2009).

The second hypothesis of the study focused on testing the abilities and contributions of the independent variables in predicting national identity. While demographic variables did not significantly predict national identity on their own, the overall model, which included key variables of interest (i.e., SI and CQ), was found to be a significant predictor. When evaluating each variable's contribution to the prediction of NI, SI, CQ, and age emerged as significant unique contributors. Among these, CQ demonstrated the highest unique contribution, followed by SI with the second-highest contribution, while age had the least unique impact. The findings suggest that students exhibiting high levels of SI and CQ are more likely to identify with Ethiopian national identity.

Previous studies in related areas of social identity and efficacy across diverse contexts have shown a direct relationship between these variables. For example, Espinosa et al. (2013), as cited in Espinosa et al. (2016), indicated that a stronger identification with one's nation correlates with increased acceptance, interpersonal confidence, and a sense of contribution to society. A robust social identity fosters psychological connections among members of the ingroup, enhancing their ability to interact with others and adapt to different environments, which can serve as a predictor of national identity. Social identity offers a sense of shared meaning, purpose, support, and efficacy (Haslam et al., 2022); therefore, SI and CQ effectively harness these qualities. An understanding of both one's own culture and the cultures of others within a nation can shape an individual's coherent acceptance of national identity. Additionally, a genuine curiosity to learn about and understand diverse cultures can cultivate a more inclusive and robust national identity, fostering appreciation among members. Furthermore, age has been identified as a significant factor, with variations in age correlating to

different levels of national identity. For instance, Windari (2021) reported similar findings, suggesting that age plays a role in an individual's attachment to national identity.

To this end, SI and CQ play a vital role in enriching NI. Students who possess higher SI and CQ are better equipped to explore commonalities that define the Ethiopian national identity, while also cultivating a profound respect for the myriad differences that stem from the nation's diverse cultural landscape. This dynamic interplay between SI and CQ empowers students to celebrate unity in diversity, fostering an inclusive environment where varied perspectives are acknowledged and valued.

Finally, we tested whether the ability of SI and CQ to predict national identity remained consistent when controlling for demographic variables. Our findings revealed that both key variables continued to demonstrate significant predictive power for national identity. To our knowledge, similar studies in the Ethiopian context have not been reported in the literature. A closely related investigation is that conducted by Keller and Omwami (2007), which examined the perceptions of national identity, citizenship, government service delivery, equity, and popular participation among Ethiopians across different regions, genders, and ethnicities in select regional states and in the capital city of Addis Ababa. The results did not indicate any contradictions between participants' demographics and their sense of Ethiopian national identity; however, variabilities in magnitude were observed. Notably, the geographic location of participants' residences emerged as the most influential predictor of the variability in Ethiopian national identity. For instance, when region of residence was included in the regression analysis, only those living in Amhara significantly predicted pride in Ethiopian nationality when compared to the reference group from Tigray.

In summary, understanding the interplay between NI, SI, and CQ is crucial for practitioners and relevant stakeholders in education and other applied fields aimed at promoting plurality and diversity. The findings of this study can provide guidance to policymakers, universities, and practitioners regarding the significance of nurturing SI and CQ to enhance national identity. From a practical standpoint, this study presents several opportunities. It is essential to incorporate the fundamental aspects of these constructs into higher education curricula to achieve targeted behavioral outcomes. This could involve the development and implementation of courses that tackle these issues, conducting regular workshops, and establishing structured extracurricular activities focused on helping students cultivate social skills, social awareness, intercultural understanding, communication abilities, and adaptability.

The well-established contact hypothesis posits that direct interaction among members of different social and cultural groups fosters improved intergroup relationships by reducing prejudice, stereotypes, animosity, and other negative perceptions. Consequently, placing students in universities outside their local communities or assisting them in obtaining international scholarships provides exposure to intercultural experiences and the chance to learn about diverse perspectives. Such social and cultural interactions can enhance their capacity to appreciate diversity, ultimately reinforcing their sense of national identity. This study could serve as a valuable reference for policymakers and organizations involved in positive youth development, community engagement, and conflict resolution initiatives.

Limitations of the Study and Recommendations

Although the study encompasses diverse cultural groups, it remains confined to the Ethiopian national context. Consequently, we recommend that future researchers (a) further investigate the constructs across various nations and/or countries with larger sample sizes, and (b) examine the constructs in contexts beyond education, as the current study may lack robust generalizability to other populations.

The identified limitations and subsequent recommendations are intended for future researchers in general. For indigenous researchers specifically, we propose the following recommendations arising from these limitations: (a) although the study analyzed NI, SI, and CQ using imported instruments and a quantitative methodology, while these tools underwent rigorous validity tests and were deemed valid and reliable, they may not adequately capture the NI, SI, and CQ measures that are distinctive to the context of this study. Thus, we suggest that future researchers delve into these attributes and the unique aspects of Ethiopian culture through qualitative research. (b) Given the significant role of ethnic salience in Ethiopia, we recommend that other researchers undertake comparative analyses of the two identity constructs or explore their implications in relation to other outcome variables.

Conclusion

We have introduced a new framework to guide further investigations in this area, emphasizing that SI and CQ are constructs that play a significant role in collective identities. We believe that our study offers crucial insights into the multifaceted constructs of NI, SI, and CQ. To ensure the paper's universality and ecological validity, we compared our results with those of similar studies conducted in other countries. As globalization increases and multiculturalism gains prominence, our findings may inform policies and practices within educational contexts, shedding light on these constructs across diverse settings. Additionally, we presented a contextualized and tailored framework specifically designed for students in Ethiopian public universities. Our study illustrated that SI and CQ are key factors in predicting NI among students within this specific context. We hope that this framework will serve as a foundation for future researchers to explore this topic in various settings. Ultimately, we aim to inspire further examination of this subject, promoting togetherness and peaceful coexistence, while fostering an effective learning environment for students.

Funding

The authors have no funding to disclose

Competing Interests

The authors declare that no competing interests exist.

Availability of Data and Material

The data that support the findings of this study are available upon request from the corresponding author.

Code availability

We used codes when encoding and generating the data.

Author Contribution

Both authors contributed to the study. They formulated the problem together. The first author carried out tasks such as

data collection, analysis, and manuscript preparation. The second author reviewed the final manuscript.

Compliance with ethical standards

The principle of informed consent was obtained from all the participants, as per the ethical standards aligned with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards in the APA. Furthermore, we obtained an ethical clearance letter from the Research Ethics Committee of the School of Psychology (Date: 01/02/2023, No. SoP-Eth/005/23).

Acknowledgment

We would like to extend our sincere appreciation to the participants for their voluntary involvement in the study.

References

- Abrams, D., & Hogg, M. A. (1990). An introduction to the social identity approach. In D. Abrams & M.A. Hogg (Eds.), *Social Identity Theory: Constructive and Critical Advances* (pp. 1–9). Harvester Wheatsheaf.
- Alkhaldi, H. S., & Alkhutaba, M. Y. (2018). Spiritual and Social Intelligence among University Students in the Light of Variables: A Comparative Study. *International Journal of Psychology and Behavioral Sciences*, 8(5), 81–95. <https://doi.org/10.5923/j.ijpbs.20180805.02>
- Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Templer, K. J., Tay, C., & Chandrasekar, N. A. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation and task performance. *Management and Organization Review*, 3(3), 335–371. <https://doi.org/10.1111/j.1740-8784.2007.00082.x>
- Ashdown, B.A., Homa, N., & Brown, C.M. (2014). Measuring gender identity and religious identity with adapted versions of the Multigroup Ethnic Identity Measure– Revised. *Journal of Educational and Developmental Psychology*, 4(1). <https://doi.org/10.5539/JEDP.V4N1P226>
- Assefa, H., Rupesinghe, K., & Tishkov, V. A. (1996). *Ethnicity and Power in the Contemporary World*.
- Bhat, Y. I., & Khandai, H. (2016). Social intelligence, study habits and academic achievements of college students of district Pulwama. *Research on Humanities and Social Sciences*, 6(7), 35–41. <https://doi.org/10.61778/ijmrast.v2i3.43>
- Brislin, R., Worthly, R., & Macnab, B. (2006). Cultural intelligence: Understanding behaviors that serve people's goals. *Group and Organizational Management*, 31(1), 40–55. <https://doi.org/10.1177/1059601105275262>
- Brubaker, R., & Cooper, F. (2000). Beyond “identity”. *Theory and Society*, 29(1), 1–47. <https://doi.org/10.1023/A:1007068714468>
- Bulmer, M. G. (1979). *Principles of statistics*. Courier Corporation.
- Cerulo, K. A. (1997). Identity construction: new issues, new directions. *Annual Review of Sociology*, 23(1), 385–409. <https://doi.org/10.1146/annurev.soc.23.1.385>
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. (2nd ed.). Lawrence Erlbaum Associates
- Crowne, K. A. (2009). The relationships among social intelligence, emotional intelligence and cultural intelligence. *Organization Management Journal*, 6(3), 148–163. <https://doi.org/10.1057/omj.2009.20>
- Demlie, D., & Andualem, T. (2024). Validation of the Tromso Social Intelligence Scale (TSIS) in the Ethiopian Context. *Ethiopian Journal of Behavioral Studies*, 7(2), 141–180. <https://doi.org/10.20372/ejobs.v7i2.10612>
- Demlie, D., & Andualem, T. (in press). Adaptation and Validation of the Multigroup Ethnic Identity Measure

- (MEIM) to the Ethiopian National Identity Measure. *Abyssinia Journal of Business and Social Science*.
- Dessalegn, R., & Meheret, A. (2004). *Democratic assistance to postconflict Ethiopia: Impact and limitations* (FSS Monograph Series No. 3). Forum for Social Studies.
- Dodge, K. A., & Pettit, G. S. (2003). A bio-psychosocial model of the development of chronic conduct problems in adolescence. *Developmental Psychology*, 39(2), 349–371. <https://doi.org/10.1037/0012-1649.39.2.349>
- Earley, P. C., & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Stanford University Press.
- Erikson, E. H. (1994). *Identity and the life cycle*. W. W. Norton & Company.
- Espinosa, A., Schmitz, M., & Rottenbacher, J. (2016). Ideological bases of national identity and their influence on subjective, psychological and social well-being in Peru. *Network of Scientific Journals from Latin America, the Caribbean, Spain and Portugal*, 11(35), 18–32.
- Finneran, N. (2003). The Persistence of memory: Nationalism, identity and the represented past. The Ethiopian experience in a global context. *Studies in Ethnicity and Nationalism*, 3(1), 21–37. <https://doi.org/10.1111/j.1754-9469.2003.tb00035.x>
- Fiske, S. T., & Taylor, S. E. (2007). *Social Cognition: From Brains to Culture*. McGraw-Hill.
- Fisseha, Y. (2016). *Conceptualizations and impacts of multiculturalism in the Ethiopian education system*. University of Toronto.
- Fox, J. (1991). *Regression Diagnostics*. Sage Publications.
- Gaines, S.O., Marelich, W., Bunce, D., Robertson, T., & Wright, B. (2013). Multigroup Ethnic Identity Measure (MEIM) expansion: measuring racial, religious, and national aspects of sense of ethnic identity within the United Kingdom. *Identity: An International Journal of Theory and Research*, 13(4), 289–317. <https://doi.org/10.1080/15283488.2013.780973>
- Gellner, E. (1983). *Nations and nationalism*. Blackwell.
- Gini, G. (2006). Brief report: Adaptation of the Italian Version of the Tromsø Social Intelligence Scale to the adolescent population. *Journal of Adolescence*, 29(2), 307–312. <https://doi.org/10.1016/j.adolescence.2005.05.003>
- Grieve, R., & Mahar, D. (2013). Can social intelligence be measured? Psychometric properties of the Tromsø Social Intelligence Scale–English Version. *The Irish Journal of Psychology*, 34(1), 1–12. <https://doi.org/10.1080/03033910.2012.737758>
- Gross, R. (1996). *Psychology: the study of mind and behavior*. Hodder & Stoughton.
- Gudina, M. (2003). *Ethiopia: Competing ethnic nationalisms and the quest for democracy, 1960–2000*. Shaker Publishing.
- Hair, J. F., Jr, Black, J. W., Babin, B. J., & Anderson, E. R. (2010). *Multivariate Data Analysis* (7th ed.). Pearson Education Limited.
- Haslam, S. A., Haslam, C., Cruwys, T., Jetten, J., Bentley, S. V., Fong, P., & Steffens, N. K. (2022). Social identity makes group-based social connection possible: Implications for loneliness and mental health. *Current Opinion in Psychology*, 43, 161–165. <https://doi.org/10.1016/j.copsyc.2021.07.01>
- Hedetoft, U., & Hjort, M. (2002). *The postnational self: Belonging and identity*. University of Minnesota Press.
- Herrmann, R., Risse, T., & Brewer, M. (2004). *Transitional identities: Becoming European in the EU*. Rowman & Littlefield.
- Hogg, M. A., & Reid, S. A. (2006). Social identity, self-categorization, and the communication of group norms. *Communication Theory*, 16(1), 7–30. <https://doi.org/10.1111/j.1468-2885.2006.00003.x>
- Honeywill, R. (2015). *The man problem: destructive masculinity in Western culture*. Palgrave Macmillan.
- Huddy, L., Ponte, A. D., & Davies, C. (2021). Nationalism, Patriotism, and Support for the European Union. *Political Psychology*, 42(6), 995–1017. <https://doi.org/10.1111/pops.12731>
- Idrus, F. (2015). Examining classroom transformational spaces using the third space theory in developing students' sense of shared identity. *Theory and Practice in Language Studies*, 5(1), 28–37. <https://doi.org/10.17507/tpls.0501.04>
- Karasawa, M. (1991). Toward an assessment of social identity: The structure of group identification and its effects on in-group evaluations. *British Journal of Social Psychology*, 30, 293–307. <https://doi.org/10.1111/j.2044-8309.1991.tb00947.x>
- Keller, E. J., & Omwami, E. M. (2007). Federalism, citizenship and national identity in Ethiopia. *The International Journal of African Studies*, 6(1), 37–69.
- Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.
- Kutner, M. H., Nachtsheim, C. J., Neter, J., & Li, W. (2005). *Applied linear statistical models*. McGraw-Hill/Irwin.
- Lacanal, E. P. (2013). Development and validation of a social intelligence inventory. *International Journal of Information and Education Technology*, 3(2), 263–267.
- Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, 28, 563–575.
- Maehler, D. B., Zabal, A., & Hanke, K. (2019). Adults' Identity in Acculturation Settings: The Multigroup Ethnic & National Identity Measure (MENI). *Identity: An International Journal of Theory and Research*, 19(4), 245–257. <https://doi.org/10.1080/15283488.2019.164140>
- Menard, S. (2002). *Applied logistic regression analysis* (Vol. 106). Sage.
- Messay, D. D., & Adal, T. A. (2025). Measurement Invariance of English and Amharic Language Versions of the Multigroup Ethnic Identity Measure (MEIM) in Ethiopian Context. *Ethiopian Renaissance Journal of Social Sciences and the Humanities*, 12(1), 193–217. <https://erjssh.uog.edu.et/index.php/ERJSSH/article/view/1083>
- MoE. (2011). *Education Statistics: Annual Abstract*. Ministry of Education: Addis Ababa.
- Nigbur, D., & Cinnirella, M. (2007). National identification, type and specificity of comparison and their effects on descriptions of national character. *European Journal of Social Psychology*, 37(4), 672–691. <https://doi.org/10.1002/ejsp.382>
- Omogbai, E. O., & Jesuorobo, W. O. (2024). Social Intelligence as A Predictor of Competencies Among Prospective Counselors in Public Universities. *Academic Journal of Psychology and Counseling*, 5(2), 126–149. <https://doi.org/10.22515/ajpc.v5i2.8548>
- Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, 7(2), 156–176. <https://doi.org/10.1177/074355489272003>
- Phinney, J. S., & Ong, A. (2007). Conceptualization and measurement of ethnic identity: current status and future directions. *Journal of Counseling Psychology*, 54(3), 271–281. <https://doi.org/10.1037/0022-0167.54.3.271>
- Roberts, R. E., Phinney, J. S., Masse, L. C., Chen, Y., Roberts, C. R., & Romero, A. (1999). The structure of ethnic identity of young adolescents from diverse ethnocultural groups. *The Journal of Early Adolescence*, 19(3), 301–322. <https://doi.org/10.1177/0272431699019003001>
- Robinson, L. (2009). *National versus ethnic identity in Africa: State, group, and individual level correlates of national identification*. Afrobarometer working papers. <http://doi.org/10.1.1.398.309&rep=rep1&type=pdf>

Social Intelligence and Cultural Intelligence as Predictors of National Identity

- Semela, T. (2012). Intergroup Relations among the Ethiopian Youth: Effects of Ethnicity, Language, and Religious Background. *Journal of Developing Societies*, 28(3), 323–354. <https://doi.org/10.1177/0169796X12453782>
- Senel, M. (2020). Investigation of the Cultural Intelligence Levels of the Turkish University Students at Foreign Language Departments. *International Journal of Language Education*, 4(3), 361–377. <https://doi.org/10.26858/ijole.v4i3.14806>
- Simon, B. (2004). *Identity in a modern society: A social psychological perspective*. Blackwell.
- Simon, B., & Grabow, O. (2010). The politicization of migrants: further evidence that politicized collective identity is a dual identity. *Political Psychology*, 31(5), 717–738. <https://doi.org/10.1111/j.1467-9221.2010.00782.x>
- Simon, B., & Ruhs, D. (2008). Identity and politicization among Turkish migrants in Germany: the role of dual identification. *Journal of Personality and Social Psychology*, 95(6), 1354–1366. <https://doi.org/10.1037/a0012630>
- Silvera, D., Martinussen, M., & Dahl, T. (2001). The Tromsø Social Intelligence Scale, a self-report measure of social intelligence. *Scandinavian Journal of Psychology*, 42(4), 313–319. <http://dx.doi.org/10.1111/1467-9450.00242>
- Sousa, M., Fontao, E., Machado, I., Mendonça, J., Rodrigues, J., & Freitas, C. (2023). Assessing Cultural Intelligence and Its Antecedents in the Portuguese Higher Education Context. *Education Sciences*, 13(6), 546. <https://doi.org/10.3390/educsci13060546>
- Smith, A. D. (1991). *National Identity*. Penguin.
- Sternberg, R.J. (1985). *Beyond IQ. A triarchic theory of human intelligence*. Cambridge University Press.
- Sternberg, R. J. (1988). *The triarchic mind: A new theory of human intelligence*. Viking.
- Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social Psychology Quarterly*, 63(3), 224–237. <https://doi.org/10.2307/2695870>
- SuB, H.-M., & Beauducel, A. (2005). Faceted Models of Intelligence. In O. Wilhelm & R. W. Engle (Eds.), *Handbook of understanding and measuring intelligence* (pp. 313–332). Sage Publications, Inc. <https://doi.org/10.4135/9781452233529.n18>
- Subramaniam, A., Ramalu, I., Wei, C. C., & Rose, R. C. (2011). The effects of cultural intelligence on cross-cultural adjustment and job performance among expatriates in Malaysia. *International Journal of Business and Social Science*, 2(9), 59–71.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Pearson.
- Tajfel, H., & Forgas, J. P. (2000). Social categorization: Cognitions, values and groups. In C. Stangor (Ed.), *Stereotypes and prejudice: Essential readings* (pp. 49–63). Psychology Press.
- Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Tajfel, H., & Turner, J. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Nelson-Hall.
- Teneta-Skwiercz, D. (2022). Diagnosis of the level of cultural intelligence among students of economics universities in Poland. *e-mentor*, 2(94), 28–35. <https://doi.org/10.15219/em94.1560>
- Verkuyten, M., & Martinovic, B. (2012). Immigrants' national identification: meanings, determinants, and consequences. *Social Issues and Policy Review*, 6(1), 82–112. <https://doi.org/10.1111/j.1751-2409.2011.01036.x>
- Vignoles, V., Regalia, C., Manzi, C., Gollledge, J., & Scabini, E. (2006). Beyond self-esteem: Influence of multiple motives on identity construction. *Journal of Personality and Social Psychology*, 90(2), 308–333. <https://doi.org/10.1037/0022-3514.90.2.308>
- World Bank. (2021). *Population, total – Ethiopia*. <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=ET>
- Windari, T. (2021). National identity attachment and its variables. *Journal of International Women's Studies*, 22(3), 81–95.
- Yoon, E. (2011). Measuring ethnic identity in the ethnic identity scale and the multigroup ethnic identity measure-revised. *Cultural Diversity and Ethnic Minority Psychology*, 17(2), 144–155. <https://doi.org/10.1037/a0023361>

Supplementary Materials

Table A1. Factor Loadings of the Two-Factor Measure of the National Identity Construct (n = 441)

	Factor	
	1	2
I have a strong attachment to my Ethiopian nationality.	.86	
I am happy that I am an Ethiopian.	.83	
I feel good about my Ethiopian cultural, historical, and traditional background.	.82	
I have a lot of pride in my Ethiopian nationality.	.78	
I have a clear understanding of my Ethiopian nationality and what it means to me.	.76	
I have a strong sense of belonging to my Ethiopian nationality.	.75	
I understand fairly well what my Ethiopian nationality group membership means to me.	.73	
I have spent time trying to find out more about my Ethiopian nationality, such as its history, traditions, customs, etc.		.84
To learn more about my Ethiopian nationality background, I have often talked to o about it.		.81
I have explored cultural issues of my Ethiopian nationality, such as special food, music, dressing, etc.		.80
I have explored the historical facts of symbols of my Ethiopian nationality, such as the Ethiopian national flag.		.78
I have spent time trying to learn about the historical facts and cultural practices of other subgroups under Ethiopian nationality membership.		.76
I have spent time trying to learn about the festivals of Irreecha, Fichee-Chambalaalla, Ashenda, and so on.		.72

Note. Extraction Method: Maximum Likelihood; 1 = commitment; 2 = exploration.

Supplementary Materials

Table A2. Factor Loadings of the Three-factor Measure of the Social Intelligence Construct (n = 441)

Items	Factor		
	1	2	3
I can often understand what others are trying to accomplish without needing them to say anything.	.82		
I understand others' wishes.	.80		
I understand other people's feelings.	.78		
I can predict how others will react to my behavior.	.76		
I can predict other people's behavior.	.73		
I can often understand what others mean through their expressions, body language, etc.	.71		
I know how my actions will make others feel.	.70		
I have no difficulties fitting in easily in social situations mostly.		.85	
I know how to exhibit respect for others in different social situations.		.85	
I am good at entering new situations and meeting people for the first time.		.78	
I have no problems getting along with others.		.77	
It doesn't take me a very long time to get to know others well.		.73	
I am good at getting on good terms with new people.		.66	
People are mostly comfortable with me when I say what I think.			.79
I realize it when I offend others or make them feel bad.			.76
I am always mindful of my actions, thinking seriously about others' reactions to what I do.			.75
I am not very surprised by the things people from different or similar backgrounds do.			.72
I often feel that it is not very difficult to understand others' choices.			.71
I can identify predictable and unpredictable people and treat them and/or act accordingly.			.70

Note. Extraction Method: Maximum Likelihood; 1 = social information processing items; 2 = social skills items; 3 = social awareness items.

Supplementary Materials

Table A3. Factor Loadings of the Four-factor Measure of the Cultural Intelligence Construct (n =441)

Items	<i>Factor</i>			
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
I know the arts, crafts, music, and specific holidays of the Wolayta, Harari, Gamo, and other cultures of Ethiopia.	.81			
I know the favorite food and the feeding rules associated with the Amhara, Somali, Hadiya, Tigray, and Guragie cultures in Ethiopia.	.76			
I know the rules of dressing, hairstyle, and related cultural practices of the Hamar, Kambata, Afar, and other cultures in Ethiopia.	.74			
I know the cultural values, norms, and religious beliefs of cultures in Ethiopia, such as the Afar, Somali, Siltie, and others.	.73			
I know some vocabulary (e.g., greeting words) and rules of communication of languages in Ethiopia, such as Guragigna, Oromiffa, Tigregna, and so on.	.72			
I know the legal and economic systems of the cultures in the Northern, Southern, Eastern, Western, and Central parts of Ethiopia.	.68			
I use facial expressions and vocal tones differently to suit different cross-cultural situations.		.83		
I vary the rate of my speaking (e.g., pause and silence) when a cross-cultural situation requires it.		.79		
I change my nonverbal behavior when a cross-cultural situation requires it.		.79		
I change my verbal behavior (e.g., accent and tone) when cross-cultural communication requires it.		.78		
I alter my facial expressions when a cross-cultural interaction requires it.		.77		
I enjoy interacting with people from different cultures.			.79	
I am curious to learn and know more about cultures that are new to me.			.78	
I am confident that I can socialize with the locals in a culture that is new to me.			.77	
I enjoy living in cultures that are unfamiliar to me and can adjust to deal with the stress associated with it.			.76	
I am confident that I can get accustomed to the living systems (e.g., shopping conditions) of other cultures in Ethiopia.			.75	
I try to adjust my cultural knowledge when I interact with people from a culture that is unfamiliar to me.				.77
I check the accuracy of my cultural knowledge when I interact with people from different cultures.				.76
I am conscious of my cultural knowledge when interacting with people from different cultural backgrounds.				.70
I am conscious of the cultural knowledge that I will apply in cross-cultural situations and/or interactions.				.66

Note. Extraction Method: Maximum Likelihood; 1 = cognitive CQ items; 2 = behavioral CQ items; 3 = motivational CQ items; 4 = metacognitive CQ items.