Data Article

School students’ perception, attitudes and skills regarding global citizenship-dataset from Vietnam

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A B S T R A C T

The dataset provides large-scale assessment data of school students’ awareness (12 items), skills (11 items) and attitudes (09 items) regarding global citizenship in Vietnam. The questionnaire was built based on UNESCO’s key learning outcomes for global citizenship education [1], criteria, scales and ideas for global citizens [2–4] and adapted to Vietnam’s education context by experts and consultants. The survey sample was collected by cluster sampling method. Six provinces and cities, presenting for three main economic-social regions in Vietnam, were selected. In each city or province, we chose three districts in both advantage and disadvantage areas. In each district, one primary school, one lower secondary school and one upper secondary school joined the survey. The survey was conducted in May 2019 with responses from 2069 students, of whom 679 primary students (grade 4 and 5), 673 lower secondary students (grade 9) and 717 upper secondary students (grade 10 and 11). The data are presented with mean, standard deviation, minimum, maximum and range of students’ responses to their perception, attitudes and behaviors concerning various themes of global citizenship education. In future, the dataset can be used for cross-national comparative studies on global citizenship to inform

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Specifications Table

| Subject | Social Sciences          |
|---------|--------------------------|
| Specific subject area | Education |
|         | Global citizenship education |
|         | Sustainable Development |

| Type of data | Table |
| How data were acquired | The data were collected directly through the questionnaire with paper and pencil method in selected schools. After the survey, the data were imported into an Excel spreadsheet and analyzed using SPSS v.26. |
| Data format | Raw Analyzed |
| Parameters for data collection | Participants who were students in grades 4, 5 (primary schools), or 9 (lower secondary schools), or 10, 11 (upper secondary schools) and had parental approval and decided to join volunteer before the survey. The selected students were from 6 cities and provinces of 3 main regions of Vietnam: Hanoi, Nam Dinh (in Northern), Quang Binh, Gia Lai (in the Middle region) and Ho Chi Minh City, Can Tho (in Southern). The schools where students were studying are in developed as well as difficult areas in terms of socio-economic conditions. |
| Description of data collection | Data were collected by cluster sampling method and obtained from 2069 responses in 54 schools in Vietnam. The questionnaire was distributed directly with paper and pen method to each student at the school by members of the research team. They completed the questionnaire from 20 to 30 min under the researcher’s monitoring. SPSS v.26 was used to clean and analyze data. |
| Data source location | Country: Vietnam |
| City/Town/Region: Hanoi | Latitude and longitude (and GPS coordinates, if possible) for collected samples/data: 21.0294498,105.8544441 |
| City/Town/Region: Nam Dinh | Latitude and longitude (and GPS coordinates, if possible) for collected samples/data: 20.2712241,106.1629895 |
| City/Town/Region: Quang Binh | Latitude and longitude (and GPS coordinates, if possible) for collected samples/data: 17.5462658,106.2576229 |
| City/Town/Region: Gia Lai | Latitude and longitude (and GPS coordinates, if possible) for collected samples/data: 13.7964067,105.8208263 |
| City/Town/Region: Ho Chi Minh City | Latitude and longitude (and GPS coordinates, if possible) for collected samples/data: 10.7758439,106.7017555 |
| City/Town/Region: Can Tho | Latitude and longitude (and GPS coordinates, if possible) for collected samples/data: 10.0375517,105.7809605 |
| Data accessibility | Repository name: Mendeley Data |
| Data identification number: | 10.17632/wh6zpmh6m.1 |
| Direct URL to data: | http://dx.doi.org/10.17632/wh6zpmh6m.1 |

Value of the Data

- This dataset has contributed to facilitating empirical evidence-based research on global citizenship education in Vietnam. The core element of the dataset is Vietnamese students’ self-assessment of their global awareness, skills, and attitudes in the global citizenship context.
The dataset can be used to investigate the potential effects of students’ activities, school’s educational settings, and parental style on students’ knowledge, skills and attitudes towards global citizenship.

Analyses derived from the dataset can enable policymakers, educational leaders, and curriculum developers to provide suitable strategies in the development of education and school’s culture as well as educational curriculum in order to enhance global citizenship.

This will also be a useful dataset for researchers who want to conduct further studies on global citizenship in a developing context such as Vietnam.

This dataset is also useful for future cross-national comparative studies on global citizenship to obtain a wider landscape of global citizenship in regional or international context.

1. Data Description

The dataset [5] presents the landscape of knowledge, skills, attitudes and behaviors of Vietnamese students about global issues and global citizenship. There are three main groups of variables: Group 1 involves 12 items about students’ awareness of global issues; Group 2, global citizen’s skills/behaviors, consists of 11 items and Group 3, with 09 items, measures students’ attitudes as global citizens.

The first group contains items concerning universal issues and values such as nature conservation, climate change, resource use and renewable resources, epidemiology, poverty, economics, digital competencies, gender equality, peace protection, interdependent relationships of communities and cultural diversity. In this group, respondents were asked to reflect how familiar they are with the topics. Students had to evaluate which level (among four levels: (1) I have not heard about this issue; (2) I have heard about this issue but cannot explain; (3) I know this issue and can explain a little bit about this; (4) I know this issue and can explain well about this) they know about every global problem in the questionnaire. Detailed descriptions of this group can be seen in Table 1.

In the second and third groups, the 4-point scale Likert, (1) disagree, (2) partly agree, (3) agree, (4) completely agree, was used for the students to indicate their agreement with statements which related to global citizens’ skills and attitude. The items in the second group are related to exploration (2 items), communication (6 items), foreign languages and digital skills (3 items). The third group comprises items examining students’ sense of responsibility towards the community, their home country or the global world. Tables 2 and 3 show the statistics of participants’ skills and attitudes with regards to global citizenship.

The dataset contains 2069 responses. The questionnaire and raw data can be referred from Mendeley data [5].

In addition, Table 4 shows the distribution of participants according to gender and school level. Table 5 illustrates the differences among primary, lower secondary, upper secondary school students in knowledge, skills and attitudes.

2. Experimental Design, Materials and Methods

With the strong globalization process and the increasing interdependence of countries and communities around the world, “global citizenship” becomes a popular concept. “Global citizen” is not only a citizen in a specific country but also a member of a larger world with active participation and responsibility in solving common issues [6,7]. Under this movement, global citizenship has been promoted by international organizations and countries to be an emerging theme in education [8]. In this international context and requirements of Vietnamese comprehensive education reform, the project “Studying on Vietnam Global Citizenship” conducted from 2017 to 2020 to assess the status of global citizenship in Vietnam [9]. The Vietnam National Institute of Educational Sciences has responsibility for this project. The research plan and process have been approved and adhere to ethical guidelines and regulations of the organization in charge.
Table 1
Descriptive statistics of students’ awareness on global issues and distribution in primary (Pri.), lower secondary (Low.), upper secondary (Upp.) schools.

| Global issues                                                      | School levels | N  | Mean  | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum |
|-------------------------------------------------------------------|---------------|----|-------|----------------|------------|-------------|-------------|---------|---------|
| Issues of environmental pollution                                 | Pri.          | 679| 3.13  | 0.81           | 0.03       | 3.07        | 3.19        | 1       | 4       |
|                                                                  | Low.          | 673| 3.37  | 0.53           | 0.02       | 3.33        | 3.41        | 1       | 4       |
|                                                                  | Upp.          | 717| 3.32  | 0.54           | 0.02       | 3.28        | 3.36        | 1       | 4       |
|                                                                  | Total         | 2069| 3.27  | 0.64           | 0.01       | 3.25        | 3.30        | 1       | 4       |
| Climate change                                                    | Pri.          | 679| 2.89  | 0.77           | 0.03       | 2.83        | 2.95        | 1       | 4       |
|                                                                  | Low.          | 673| 3.09  | 0.58           | 0.02       | 3.05        | 3.14        | 1       | 4       |
|                                                                  | Upp.          | 717| 3.14  | 0.54           | 0.02       | 3.10        | 3.18        | 1       | 4       |
|                                                                  | Total         | 2069| 3.10  | 0.64           | 0.01       | 3.02        | 3.07        | 1       | 4       |
| The risk of depletion and the rational use of resources (energy, clean water, etc.) | Pri.          | 679| 2.94  | 0.86           | 0.03       | 2.88        | 3.01        | 1       | 4       |
|                                                                  | Low.          | 673| 3.18  | 0.63           | 0.02       | 3.14        | 3.23        | 1       | 4       |
|                                                                  | Upp.          | 717| 3.19  | 0.58           | 0.02       | 3.15        | 3.23        | 1       | 4       |
|                                                                  | Total         | 2069| 3.11  | 0.71           | 0.02       | 3.08        | 3.14        | 1       | 4       |
| Disease problems                                                  | Pri.          | 679| 2.63  | 0.81           | 0.03       | 2.57        | 2.70        | 1       | 4       |
|                                                                  | Low.          | 673| 2.81  | 0.62           | 0.02       | 2.77        | 2.86        | 1       | 4       |
|                                                                  | Upp.          | 717| 2.81  | 0.62           | 0.02       | 2.76        | 2.85        | 1       | 4       |
|                                                                  | Total         | 2069| 2.75  | 0.69           | 0.02       | 2.72        | 2.78        | 1       | 4       |
| The rapid population growth in some places and the risk of population aging in some parts of the world | Pri.          | 679| 2.48  | 1.05           | 0.04       | 2.40        | 2.56        | 1       | 4       |
|                                                                  | Low.          | 673| 2.78  | 0.73           | 0.03       | 2.73        | 2.84        | 1       | 4       |
|                                                                  | Upp.          | 717| 2.89  | 0.68           | 0.03       | 2.84        | 2.94        | 1       | 4       |
|                                                                  | Total         | 2069| 2.72  | 0.85           | 0.02       | 2.68        | 2.76        | 1       | 4       |

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Table 1 (continued)

| Global issues                                                                 | School levels | N  | Mean  | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum |
|-------------------------------------------------------------------------------|---------------|----|-------|----------------|------------|-------------|-------------|---------|---------|
| The cause of poverty                                                          | Pri.          | 679| 2.77  | 0.93           | 0.04       | 2.70        | 2.84        | 1       | 4       |
|                                                                                | Low.          | 673| 3.00  | 0.70           | 0.03       | 2.95        | 3.05        | 1       | 4       |
|                                                                                | Upp.          | 717| 3.06  | 0.66           | 0.02       | 3.01        | 3.11        | 1       | 4       |
|                                                                                | Total         | 2069| 2.95  | 0.78           | 0.02       | 2.91        | 2.98        | 1       | 4       |
| Unemployment issues in the world                                             | Pri.          | 679| 2.43  | 0.99           | 0.04       | 2.36        | 2.50        | 1       | 4       |
|                                                                                | Low.          | 673| 2.85  | 0.70           | 0.03       | 2.79        | 2.90        | 1       | 4       |
|                                                                                | Upp.          | 717| 2.94  | 0.68           | 0.03       | 2.89        | 2.99        | 1       | 4       |
|                                                                                | Total         | 2069| 2.74  | 0.83           | 0.02       | 2.71        | 2.78        | 1       | 4       |
| The development and influence of the internet                                 | Pri.          | 679| 2.71  | 0.98           | 0.04       | 2.63        | 2.78        | 1       | 4       |
|                                                                                | Low.          | 673| 3.27  | 0.68           | 0.03       | 3.22        | 3.32        | 1       | 4       |
|                                                                                | Upp.          | 717| 3.25  | 0.61           | 0.02       | 3.21        | 3.30        | 1       | 4       |
|                                                                                | Total         | 2069| 3.08  | 0.81           | 0.02       | 3.04        | 3.11        | 1       | 4       |
| Gender equality in different parts of the world                               | Pri.          | 679| 2.76  | 1.02           | 0.04       | 2.69        | 2.84        | 1       | 4       |
|                                                                                | Low.          | 673| 2.86  | 0.74           | 0.03       | 2.81        | 2.92        | 1       | 4       |
|                                                                                | Upp.          | 717| 2.91  | 0.67           | 0.03       | 2.86        | 2.95        | 1       | 4       |
|                                                                                | Total         | 2069| 2.84  | 0.82           | 0.02       | 2.81        | 2.88        | 1       | 4       |
| Peace protection in the world                                                 | Pri.          | 679| 3.07  | 0.94           | 0.04       | 3.00        | 3.14        | 1       | 4       |
|                                                                                | Low.          | 673| 3.24  | 0.67           | 0.03       | 3.19        | 3.29        | 1       | 4       |
|                                                                                | Upp.          | 717| 3.05  | 0.69           | 0.03       | 3.00        | 3.10        | 1       | 4       |
|                                                                                | Total         | 2069| 3.12  | 0.78           | 0.02       | 3.08        | 3.15        | 1       | 4       |
| The coherent, interactive, and interdependent relationships of communities (such as between one country and another, between local, national and global levels) (e.g., environment protection or pollution action at a local, in a country can affect the environment in another region or country, etc.) | Pri.          | 679| 2.52  | 0.91           | 0.03       | 2.45        | 2.59        | 1       | 4       |
|                                                                                | Low.          | 673| 2.63  | 0.74           | 0.03       | 2.58        | 2.69        | 1       | 4       |
|                                                                                | Upp.          | 717| 2.66  | 0.71           | 0.03       | 2.61        | 2.71        | 1       | 4       |
|                                                                                | Total         | 2069| 2.61  | 0.80           | 0.02       | 2.57        | 2.64        | 1       | 4       |
| Cultural diversity                                                            | Pri.          | 679| 2.58  | 0.96           | 0.04       | 2.51        | 2.66        | 1       | 4       |
|                                                                                | Low.          | 673| 2.73  | 0.76           | 0.03       | 2.68        | 2.79        | 1       | 4       |
|                                                                                | Upp.          | 717| 2.86  | 0.68           | 0.03       | 2.81        | 2.91        | 1       | 4       |
|                                                                                | Total         | 2069| 2.73  | 0.82           | 0.02       | 2.69        | 2.76        | 1       | 4       |
Table 2
Descriptive statistics of students' skills regarding global citizenship in primary, lower secondary, upper secondary schools.

| Students' skills regarding global citizenship | School levels | N  | Mean   | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum |
|---------------------------------------------|---------------|----|--------|----------------|------------|--------------|-------------|---------|---------|
| **About exploration, discovery**             |               |    |        |                |            |              |             |         |         |
| I like to explore by myself.                | Pri.          | 679| 3.23   | 0.84           | 0.03       | 3.17         | 3.29        | 1       | 4       |
|                                             | Low.          | 673| 3.14   | 0.73           | 0.03       | 3.08         | 3.20        | 1       | 4       |
|                                             | Upp.          | 717| 3.18   | 0.72           | 0.03       | 3.13         | 3.24        | 1       | 4       |
|                                             | Total         | 2069| 3.18  | 0.76           | 0.02       | 3.15         | 3.22        | 1       | 4       |
| I can express my own opinion on an issue.    | Pri.          | 679| 2.92   | 0.86           | 0.03       | 2.86         | 2.99        | 1       | 4       |
|                                             | Low.          | 673| 3.01   | 0.74           | 0.03       | 2.95         | 3.07        | 1       | 4       |
|                                             | Upp.          | 717| 3.00   | 0.75           | 0.03       | 2.95         | 3.06        | 1       | 4       |
|                                             | Total         | 2069| 2.98  | 0.78           | 0.02       | 2.94         | 3.01        | 1       | 4       |
| **About communication**                      |               |    |        |                |            |              |             |         |         |
| I can play with my friends even if we have different features (about hobbies, etc.) | Pri.          | 679| 3.53   | 0.70           | 0.03       | 3.48         | 3.59        | 1       | 4       |
|                                             | Low.          | 673| 3.42   | 0.76           | 0.03       | 3.36         | 3.47        | 1       | 4       |
|                                             | Upp.          | 717| 3.29   | 0.76           | 0.03       | 3.24         | 3.35        | 1       | 4       |
|                                             | Total         | 2069| 3.41  | 0.75           | 0.02       | 3.38         | 3.44        | 1       | 4       |
| I can work with my friends despite having different viewpoints. | Pri.          | 679| 2.93   | 0.98           | 0.04       | 2.86         | 3.00        | 1       | 4       |
|                                             | Low.          | 673| 2.86   | 0.92           | 0.04       | 2.79         | 2.93        | 1       | 4       |
|                                             | Upp.          | 717| 2.78   | 0.88           | 0.03       | 2.71         | 2.84        | 1       | 4       |
|                                             | Total         | 2069| 2.85  | 0.93           | 0.02       | 2.81         | 2.89        | 1       | 4       |
| I behave with my friends equally, regardless of male, female, ethnicity, or religion. | Pri.          | 679| 3.52   | 0.77           | 0.03       | 3.46         | 3.58        | 1       | 4       |
|                                             | Low.          | 673| 3.70   | 0.54           | 0.02       | 3.66         | 3.74        | 1       | 4       |
|                                             | Upp.          | 717| 3.67   | 0.56           | 0.02       | 3.62         | 3.71        | 1       | 4       |
|                                             | Total         | 2069| 3.63  | 0.64           | 0.01       | 3.60         | 3.66        | 1       | 4       |
| Before criticizing someone, I imagined how I would feel if I were in their position. | Pri.          | 679| 3.17   | 0.86           | 0.03       | 3.11         | 3.24        | 1       | 4       |
|                                             | Low.          | 673| 3.16   | 0.79           | 0.03       | 3.10         | 3.22        | 1       | 4       |
|                                             | Upp.          | 717| 3.17   | 0.79           | 0.03       | 3.12         | 3.23        | 1       | 4       |
|                                             | Total         | 2069| 3.17  | 0.81           | 0.02       | 3.13         | 3.20        | 1       | 4       |
| I always listen carefully to what others say | Pri.          | 679| 3.33   | 0.78           | 0.03       | 3.28         | 3.39        | 1       | 4       |
|                                             | Low.          | 673| 3.23   | 0.68           | 0.03       | 3.18         | 3.29        | 1       | 4       |
|                                             | Upp.          | 717| 3.25   | 0.71           | 0.03       | 3.19         | 3.30        | 1       | 4       |
|                                             | Total         | 2069| 3.27  | 0.73           | 0.02       | 3.24         | 3.30        | 1       | 4       |

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Table 2 (continued)

Students’ skills regarding global citizenship

| School levels | N   | Mean | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum |
|---------------|-----|------|----------------|------------|-------------|-------------|---------|---------|
| If I say people do not understand, I will find another way (e.g., re-explain, write down, give specific examples, etc.) | Pri. | 679  | 3.39           | 0.76       | 0.03        | 3.33        | 3.44    | 1       | 4       |
|               | Low. | 673  | 3.30           | 0.76       | 0.03        | 3.24        | 3.36    | 1       | 4       |
|               | Upp. | 717  | 3.21           | 0.79       | 0.03        | 3.15        | 3.27    | 1       | 4       |
|               | Total| 2069 | 3.30           | 0.77       | 0.02        | 3.26        | 3.33    | 1       | 4       |
| About using the Internet, foreign languages | Pri. | 679  | 3.19           | 0.87       | 0.03        | 3.12        | 3.25    | 1       | 4       |
| I can find information to study on the Internet with support tools such as Google, Yahoo, etc. | Low. | 673  | 3.58           | 0.65       | 0.03        | 3.53        | 3.62    | 1       | 4       |
|               | Upp. | 717  | 3.58           | 0.62       | 0.02        | 3.53        | 3.62    | 1       | 4       |
|               | Total| 2069 | 3.45           | 0.74       | 0.02        | 3.42        | 3.48    | 1       | 4       |
| I can determine which information on the Internet is appropriate for me | Pri. | 679  | 2.96           | 0.94       | 0.04        | 2.89        | 3.04    | 1       | 4       |
|               | Low. | 673  | 3.48           | 0.72       | 0.03        | 3.42        | 3.53    | 1       | 4       |
|               | Upp. | 717  | 3.51           | 0.65       | 0.02        | 3.46        | 3.55    | 1       | 4       |
|               | Total| 2069 | 3.32           | 0.82       | 0.02        | 3.28        | 3.35    | 1       | 4       |
| I can discuss it with foreigners in foreign languages | Pri. | 679  | 2.74           | 0.97       | 0.04        | 2.67        | 2.82    | 1       | 4       |
|               | Low. | 673  | 2.77           | 0.94       | 0.04        | 2.69        | 2.84    | 1       | 4       |
|               | Upp. | 717  | 2.64           | 0.89       | 0.03        | 2.57        | 2.70    | 1       | 4       |
|               | Total| 2069 | 2.71           | 0.94       | 0.02        | 2.67        | 2.75    | 1       | 4       |
Table 3
Descriptive statistics of students' attitude in primary, lower secondary, upper secondary schools.

| Students' attitude regarding global citizenship | School levels | N   | Mean | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum |
|------------------------------------------------|---------------|-----|------|----------------|------------|-------------|-------------|---------|---------|
| Ready to act for the community |                 |     |      |                |            |             |             |         |         |
| I am willing to introduce the culture and history of my local and country to international friends | Pri.          | 679 | 3.20 | 0.84           | 0.03       | 3.14        | 3.26        | 1       | 4       |
|                                           | Low.          | 673 | 3.18 | 0.81           | 0.03       | 3.12        | 3.24        | 1       | 4       |
|                                           | Upp.          | 717 | 3.22 | 0.79           | 0.03       | 3.16        | 3.28        | 1       | 4       |
|                                           | Total         | 2069| 3.20 | 0.81           | 0.02       | 3.17        | 3.24        | 1       | 4       |
| I am willing to make friends with foreigners |                 |     |      |                |            |             |             |         |         |
|                                           | Pri.          | 679 | 3.09 | 0.93           | 0.04       | 3.02        | 3.16        | 1       | 4       |
|                                           | Low.          | 673 | 3.13 | 0.82           | 0.03       | 3.07        | 3.19        | 1       | 4       |
|                                           | Upp.          | 717 | 3.11 | 0.80           | 0.03       | 3.05        | 3.17        | 1       | 4       |
|                                           | Total         | 2069| 3.11 | 0.85           | 0.02       | 3.07        | 3.15        | 1       | 4       |
| I want to learn about another country's history and culture in the world and share with my friends what I have studied. |                 |     |      |                |            |             |             |         |         |
|                                           | Pri.          | 679 | 3.20 | 0.84           | 0.03       | 3.14        | 3.26        | 1       | 4       |
|                                           | Low.          | 673 | 3.04 | 0.79           | 0.03       | 2.98        | 3.10        | 1       | 4       |
|                                           | Upp.          | 717 | 3.04 | 0.80           | 0.03       | 2.98        | 3.10        | 1       | 4       |
|                                           | Total         | 2069| 3.09 | 0.81           | 0.02       | 3.06        | 3.13        | 1       | 4       |
| I want to find a global problem by myself, such as environmental pollution, endangered animals, etc. and share with my friends what I have found. |                 |     |      |                |            |             |             |         |         |
|                                           | Pri.          | 679 | 3.16 | 0.87           | 0.03       | 3.09        | 3.22        | 1       | 4       |
|                                           | Low.          | 673 | 3.00 | 0.79           | 0.03       | 2.94        | 3.06        | 1       | 4       |
|                                           | Upp.          | 717 | 3.00 | 0.76           | 0.03       | 2.94        | 3.05        | 1       | 4       |
|                                           | Total         | 2069| 3.05 | 0.81           | 0.02       | 3.02        | 3.09        | 1       | 4       |

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Table 3 (continued)

| Students’ attitude regarding global citizenship | School levels | N   | Mean | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum |
|-----------------------------------------------|---------------|-----|------|----------------|------------|-------------|-------------|---------|---------|
| I am willing to participate in activities to protect the environment or save resources in my schools or my living place. (For example, planting green trees, cleaning, keep public places clean, using water, electricity, etc.) | Pri.          | 679 | 3.59 | 0.64           | 0.02       | 3.54        | 3.64        | 1       | 4       |
|                                               | Low.          | 673 | 3.34 | 0.71           | 0.03       | 3.28        | 3.39        | 1       | 4       |
|                                               | Total         | 2069| 3.41 | 0.70           | 0.02       | 3.38        | 3.44        | 1       | 4       |
| I often use resources economically (for example: turn off the lights when leaving the room, turn off the TV when not watching, always turn off the tap after use, etc.). | Pri.          | 679 | 3.61 | 0.64           | 0.02       | 3.56        | 3.66        | 1       | 4       |
|                                               | Low.          | 717 | 3.31 | 0.74           | 0.03       | 3.26        | 3.36        | 1       | 4       |
|                                               | Total         | 2069| 3.42 | 0.71           | 0.02       | 3.39        | 3.45        | 1       | 4       |
| I am willing to defend my friends when they are bullied. | Pri.          | 679 | 3.43 | 0.73           | 0.03       | 3.37        | 3.48        | 1       | 4       |
|                                               | Low.          | 673 | 3.23 | 0.75           | 0.03       | 3.18        | 3.29        | 1       | 4       |
|                                               | Upp.          | 717 | 3.14 | 0.77           | 0.03       | 3.09        | 3.20        | 1       | 4       |
|                                               | Total         | 2069| 3.34 | 0.76           | 0.02       | 3.23        | 3.30        | 1       | 4       |
| I am willing to donate books and utensils for the needy | Pri.          | 679 | 3.62 | 0.62           | 0.02       | 3.57        | 3.67        | 1       | 4       |
|                                               | Low.          | 673 | 3.62 | 0.57           | 0.02       | 3.57        | 3.66        | 1       | 4       |
|                                               | Upp.          | 717 | 3.56 | 0.61           | 0.02       | 3.52        | 3.61        | 1       | 4       |
|                                               | Total         | 2069| 3.60 | 0.60           | 0.01       | 3.57        | 3.63        | 1       | 4       |
| I am willing to help people in need.          | Pri.          | 679 | 3.66 | 0.57           | 0.02       | 3.62        | 3.70        | 1       | 4       |
|                                               | Low.          | 673 | 3.49 | 0.61           | 0.02       | 3.45        | 3.54        | 2       | 4       |
|                                               | Upp.          | 717 | 3.46 | 0.63           | 0.02       | 3.41        | 3.51        | 2       | 4       |
|                                               | Total         | 2069| 3.54 | 0.61           | 0.01       | 3.51        | 3.56        | 1       | 4       |
Table 4
Distribution of participants in gender and school levels.

| School level     | Male | Female | Total |
|------------------|------|--------|-------|
| Primary          | 310  | 369    | 679   |
| Lower Secondary  | 300  | 373    | 673   |
| Upper Secondary  | 328  | 389    | 717   |
| **Total**        | 938  | 1131   | 2069  |

Table 5
Differences among primary, lower secondary, upper secondary school students in knowledge, skills and attitudes (ANOVA).

| Group of variables                                                                 | School levels | Sum of Squares | df | Mean Square | F    | Sig.  |
|-----------------------------------------------------------------------------------|---------------|----------------|----|-------------|------|-------|
| Issues of environmental pollution                                                 | Between Groups| 22.224         | 2  | 11.112      | 27.532 | .000  |
|                                                                                   | Within Groups | 833.843        | 2066| .404        |       |       |
|                                                                                   | Total         | 856.068        | 2068| 12.034      | 29.921 | .000  |
|                                                                                 | Between Groups| 830.929        | 2066| .402        |       |       |
| Climate change                                                                    | Within Groups | 854.998        | 2068|             |       |       |
|                                                                                 | Total         | 1030.180       | 2068|             |       |       |
| The risk of depletion and the rational use of resources (energy, clean water, etc.)| Between Groups| 26.964         | 2  | 13.482      | 27.764 | .000  |
|                                                                                   | Within Groups | 1003.216       | 2066| .486        |       |       |
|                                                                                   | Total         | 1030.180       | 2068|             |       |       |
| Disease problems                                                                  | Between Groups| 14.151         | 2  | 7.076       | 14.877 | .000  |
|                                                                                   | Within Groups | 982.642        | 2066| .476        |       |       |
|                                                                                 | Total         | 1003.807       | 2068|             |       |       |
| The rapid population growth in some places and the risk of population aging in some parts of the world | Between Groups| 63.607         | 2  | 31.804      | 45.509 | .000  |
|                                                                                   | Within Groups | 1443.802       | 2066| .699        |       |       |
|                                                                                   | Total         | 1507.409       | 2068|             |       |       |
| The cause of poverty                                                              | Between Groups| 31.218         | 2  | 15.609      | 26.226 | .000  |
|                                                                                   | Within Groups | 1229.610       | 2066| .595        |       |       |
|                                                                                 | Total         | 1260.828       | 2068|             |       |       |
| Unemployment issues in the world                                                  | Between Groups| 100.821        | 2  | 50.411      | 78.082 | .000  |
|                                                                                   | Within Groups | 1333.839       | 2066| .646        |       |       |
|                                                                                   | Total         | 1434.660       | 2068|             |       |       |
| The development and influence of the Internet                                     | Between Groups| 139.852        | 2  | 69.926      | 117.424 | .000  |
|                                                                                   | Within Groups | 1230.307       | 2066| .596        |       |       |
|                                                                                   | Total         | 1370.159       | 2068|             |       |       |
| Gender equality in different parts of the world                                   | Between Groups| 7.399          | 2  | 3.699       | 5.507  | .004  |
|                                                                                   | Within Groups | 1387.799       | 2066| .672        |       |       |
|                                                                                 | Total         | 1395.198       | 2068|             |       |       |

(continued on next page)
| Group of variables | School levels | Sum of Squares | df | Mean Square | F    | Sig. |
|--------------------|--------------|----------------|----|-------------|------|------|
| Peace protection in the world | Between Groups | 14.226 | 2 | 7.113 | 11.887 | .000 |
|                     | Within Groups | 1236.235 | 2066 | .598 |
|                     | Total | 1250.460 | 2068 | |
| The coherent, interactive, and interdependent relationships of communities (such as between one country and another, between local, national and global levels) | Between Groups | 7.933 | 2 | 3.966 | 6.301 | .002 |
|                     | Within Groups | 1300.453 | 2066 | .629 |
|                     | Total | 1308.386 | 2068 | |
| Cultural diversity | Between Groups | 27.117 | 2 | 13.559 | 20.784 | .000 |
|                     | Within Groups | 1347.770 | 2066 | .652 |
|                     | Total | 1374.887 | 2068 | |
| About exploration, discovery | I like to explore by myself. | Between Groups | 3.116 | 2 | 1.558 | 2.668 | .070 |
|                     | Within Groups | 1206.459 | 2066 | .584 |
|                     | Total | 1209.575 | 2068 | |
|                     | I can express my own opinion on an issue. | Between Groups | 3.394 | 2 | 1.697 | 2.768 | .063 |
|                     | Within Groups | 1266.627 | 2066 | .613 |
|                     | Total | 1270.021 | 2068 | |
| About communication | I can play with my friends even if we have different features (about hobbies, etc.) | Between Groups | 20.397 | 2 | 10.198 | 18.633 | .000 |
|                     | Within Groups | 1130.756 | 2066 | .547 |
|                     | Total | 1151.152 | 2068 | |
|                     | I can work with my friends despite having different viewpoints | Between Groups | 8.453 | 2 | 4.227 | 4.907 | .007 |
|                     | Within Groups | 1779.465 | 2066 | .861 |
|                     | Total | 1887.919 | 2068 | |
|                     | I behave with my friends equally, regardless of male, female, ethnicity, or religion | Between Groups | 12.483 | 2 | 6.242 | 15.631 | .000 |
|                     | Within Groups | 824.953 | 2066 | .399 |
|                     | Total | 837.436 | 2068 | |
|                     | Before criticizing someone, I imagined how I would feel if I were in their position | Between Groups | 837.436 | 2 | .038 | .058 | .944 |
|                     | Within Groups | 1372.716 | 2066 | .664 |
|                     | Total | 1372.736 | 2068 | |
|                     | I always listen carefully to what others say | Between Groups | 4.022 | 2 | 2.011 | 3.807 | .022 |
|                     | Within Groups | 1091.322 | 2066 | .528 |
|                     | Total | 1095.345 | 2068 | |

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Table 5 (continued)

| Group of variables                                                                 | School levels                                                                 | Sum of Squares | df  | Mean Square | F      | Sig.  |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------|-----|-------------|--------|-------|
| If I say people do not understand, I will find another way (e.g., re-explain,     | Between Groups                                                              | 11,251         | 2   | 5.625       | 9.507  | .000  |
| write down, give specific examples, etc.)                                        | Within Groups                                                                | 1222,537       | 2066| .592        |        |       |
|                                                                                  | Total                                                                         | 1233,788       | 2068|             |        |       |
| **About using the Internet, foreign languages**                                   |                                                                               |                |     |             |        |       |
| I can find information to study on the Internet with support tools such as        | Between Groups                                                              | 68,843         | 2   | 34.422      | 66.146 | .000  |
| Google, Yahoo, etc.                                                               | Within Groups                                                                | 1075,129       | 2066| .520        |        |       |
|                                                                                  | Total                                                                         | 1143,972       | 2068|             |        |       |
| I can determine which information on the Internet is appropriate for me           | Between Groups                                                              | 127,197        | 2   | 63.599      | 105.262| .000  |
|                                                                                  | Within Groups                                                                | 1248,266       | 2066| .604        |        |       |
|                                                                                  | Total                                                                         | 1375,464       | 2068|             |        |       |
| I can discuss it with foreigners in foreign languages                             | Between Groups                                                              | 6.730          | 2   | 3.365       | 3.857  | .021  |
|                                                                                  | Within Groups                                                                | 1802,309       | 2066| .872        |        |       |
|                                                                                  | Total                                                                         | 1809,039       | 2068|             |        |       |
| **Ready to act for the community**                                               |                                                                               |                |     |             |        |       |
| I am willing to introduce the culture and history of my local and country to     | Between Groups                                                              | .492           | 2   | .246        | .371   | .690  |
| international friends                                                             | Within Groups                                                                | 1370,463       | 2066| .663        |        |       |
|                                                                                  | Total                                                                         | 1370,955       | 2068|             |        |       |
| I am willing to make friends with foreigners                                     | Between Groups                                                              | .567           | 2   | .283        | .390   | .677  |
|                                                                                  | Within Groups                                                                | 1503,087       | 2066| .728        |        |       |
|                                                                                  | Total                                                                         | 1503,654       | 2068|             |        |       |
| I want to learn about another country’s history and culture in the world and     | Between Groups                                                              | 12.432         | 2   | 6.216       | 9.481  | .000  |
| share with my friends what I have studied                                        | Within Groups                                                                | 1354,485       | 2066| .656        |        |       |
|                                                                                  | Total                                                                         | 1366,917       | 2068|             |        |       |
| I want to find a global problem by myself, such as environmental pollution,      | Between Groups                                                              | 11.552         | 2   | 5.776       | 8.808  | .000  |
| endangered animals and share with my friends what I have found.                  | Within Groups                                                                | 1354,810       | 2066| .656        |        |       |
|                                                                                  | Total                                                                         | 1366,362       | 2068|             |        |       |
| I am willing to participate in activities to protect the environment or save     | Between Groups                                                              | 32.679         | 2   | 16.339      | 34.700 | .000  |
| resources in my schools or my living place. (For example, planting green trees,   | Within Groups                                                                | 972,824        | 2066| .471        |        |       |
| cleaning, keep public places clean, using water, electricity, etc.)              | Total                                                                         | 1005,503       | 2068|             |        |       |
| I often use resources economically (for example: turn off the lights when leaving| Between Groups                                                              | 35.808         | 2   | 17.904      | 37.188 | .000  |
| the room, turn off the TV when not watching, always turn off the tap after use,  | Within Groups                                                                | 994,679        | 2066| .481        |        |       |
| etc.).                                                                            | Total                                                                         | 1030,487       | 2068|             |        |       |
| I am willing to defend my friends when they are bullied.                          | Between Groups                                                              | 29.257         | 2   | 14.628      | 25.863 | .000  |
|                                                                                  | Within Groups                                                                | 1168,537       | 2066| .566        |        |       |
|                                                                                  | Total                                                                         | 1197,794       | 2068|             |        |       |

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Table 5 (continued)

| Group of variables | School levels | Sum of Squares | df | Mean Square | F     | Sig. |
|--------------------|--------------|----------------|----|-------------|-------|------|
| I am willing to donate books and utensils for the needy | Between Groups | 1.415 | 2 | .708 | 1.961 | .141 |
|                   | Within Groups | 745.424 | 2066 | .361 |
|                   | Total | 746.839 | 2068 |
| I am willing to help people in need. | Between Groups | 15.586 | 2 | 7.793 | 21.324 | .000 |
|                   | Within Groups | 755.053 | 2066 | .365 |
|                   | Total | 770.639 | 2068 |

Literature provides a variety of global citizenship definitions and criteria for global citizens [1–4]. Items in the questionnaire primarily revolve around the concept of global citizenship, which are constituted from the awareness of global issues [10], the cognitive, socio-emotional and behavior domains [1] and Oxfam’s curriculum for global citizenship [2]. The questionnaire was developed by educational experts and piloted in one school before being conducted on the national scale.

The questionnaire was piloted at the Experimental School of Education Science (Hanoi, Vietnam) with the participation of 39 primary students, 45 lower secondary students and 40 upper secondary students. After piloting, some items and wording were edited, and the questionnaire was considered again by the experts.

The participants in the large-scale survey were chosen by cluster sampling method. There were 54 schools in the selected list belong to 6 provinces and cities (Hanoi, Nam Dinh, Quang Binh, Gia Lai, Ho Chi Minh City, Can Tho) in 3 main regions (North, Middle and South of Vietnam). In each province, 9 schools in 3 districts were chosen so that in each of the district there were 1 primary, 1 lower secondary and 1 upper secondary school being sampled. The schools in the survey list are from urban as well as rural areas of Vietnam.

Before this activity, local education managers and school administrators were informed about the plans, objectives, contents, methods and participants of the survey. The school administrators informed students’ parents and students, who were on the list of participants, about this project and the survey. Before the survey was conducted, all participants and guardians had confirmed volunteering and signed consent forms. Student participants completed the paper questionnaire at schools within 30 min.

The survey was conducted with the participation of 2379 students, in which there were 814 primary students, 776 lower secondary students and 789 upper secondary students. 310 responses were removed because of missing data issues [11]. After cleaning data, the analysis data set contained 2069 valid responses. In this study, data were analyzed by IBM SPSS Statistics 26.

In the future, the research results of this dataset will provide educational policymakers with insightful information on the situation of global citizenship education in Vietnam [12], in order to promote its integration into the national curriculum [13]. This will also be a valuable resource for cross-national comparative research on global citizenship [14]. In addition, in-depth analyses of the data can reveal potential factors affecting students’ acquisition of knowledge, skills and attitudes towards global citizenship, such as demographic features, parental style or school settings.

Ethics Statement

The Vietnam National Institute of Educational Sciences has responsibility for this project. The study process has been approved and adheres to the ethical guidelines and regulations of the organisation in charge. The study was conducted with the agreement and the volunteer of
students, their parents, school managers and local educational administrators. The research team informed information related to the research participants and stakeholders before taking place the survey. All participants and guardians had signed consent form before they took part in the survey.

CRediT Author Statement

Hong-Lien Nguyen: Conceptualization, Writing – original draft; Viet-Hung Dinh: Software, Data curation, Validation; Phuong-Hanh Hoang: Methodology, Writing – reviewing & editing; Viet-Thai Luong: Conceptualization, Methodology, Supervision; Anh-Vinh Le: Supervision, Writing – reviewing & editing

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships which have or could be perceived to have influenced the work reported in this article.

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References

[1] UNESCO Bangkok, Global Citizenship Education: Topics and Learning Objectives, UNESCO, France, 2015. https://bangkok.unesco.org/content/global-citizenship-education-topics-and-learning-objectives. Accessed March 16, 2021.
[2] Oxfam, Education for Global Citizenship: A guide for schools, Oxfam House, UK, 2015. https://oxfamlibrary.openrepository.com/bitstream/handle/10546/620105/edu-global-citizenship-schools-guide-091115-en.pdf?sequence=11&isAllowed=y.
[3] D.B. Morais, A.C. Ogden, Initial development and validation of the global citizenship scale. J. Stud. Int. Educ. 15 (2011) 445–466, doi:10.1177/1028315310375308.
[4] S. Tawil, Education for ‘Global Citizenship’: A framework for discussion, UNESCO Education Research and Foresight, Paris, [ERF Working Papers Series, No. 7, 2013. https://unesdoc.unesco.org/ark:/48223/pf0000223784.
[5] H.L. Nguyen, V.T. Luong, D.Q. Bui, Global citizenship – Dataset from Vietnam, Mendeley Data, v1, 2020, doi: 10.17632/wh6zpkmh6m.1.
[6] C. Carabain, S. Keulemans, M. van Gent, G. Spitz, Global Citizenship: from Public Support to Active Participation, NCDO, Amsterdam, 2012. https://www.gcedclearinghouse.org/resources/global-citizenship-public-support-active-participation.
[7] A. Akkari, K. Maleq, Global Citizenship Education: Critical and International Perspectives, Springer Nature, 2020, doi:10.1007/978-3-030-44617-8.
[8] UNESCO, Global Citizenship Education: Preparing Learners for the Challenges of the 21st Century, UNESCO, France, 2014. https://www.gcedclearinghouse.org/resources/global-citizenship-education-preparing-learners-challenges-21st-century.
[9] Luong Viet Thai, research team, Chuong trinh gioi duc pho thong moi va van de gioi duc cong dan toan cau [New general education curriculum and global citizenship education], Vietnam J. Educ. Sci. 14 (2019) 7–12.
[10] OECD, PISA 2018 Global Competence, 2018. https://www.oecd.org/pisa/pisa-2018-global-competence.htm. Accessed May 12, 2021.
[11] J.F. Hair, et al., Multivariate Data Analysis, 6th Edition, Prentice Hall, New Jersey, 2006. https://www.academia.edu/6955544/Joseph_F_Hair_William_C_Black_Barry_J_Babin_Rolph_E_Anderson_Multivariate_Data_Analysis_7th_Edition_2009.
[12] W. Lee, S. Leung, Global citizenship education in Hong Kong and Shanghai secondary schools: Ideals, realities and expectations, Citiz. Teach. Learn 2 (2006) 68–84. http://ira.lib.polyu.edu.hk/handle/10397/55075.
[13] M. Lee, Japan’s acceptance of global citizenship education –2017 curriculum guidelines and indicator of global citizenship education, Korean J. Japan Educ. 25 (2020) 1–21, doi:10.1007/978-3-030-44617-8.
[14] Y.H. Cho, E. Chi, A comparison of attitudes related to global citizenship between Korean-and US-educated Korean university students, Asia Pac. J. Educ. 35 (2015) 213–225, doi:10.1080/02188791.2014.924393.