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**Article**

# Students' Images of the Future and Their Implications for Curriculum Practices

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## Abstract

*This study examines Ethiopian secondary school students' images of the future, focusing on their personal, national, and global perspectives. Using a survey research design, data were collected from 443 students through structured questionnaires. Analyses included descriptive statistics, t-tests, and ANOVA. The findings revealed that while most students expressed optimism about their personal futures, they were largely pessimistic about national and global challenges, including economic inequality, environmental degradation, and political instability. Notably, optimism about personal futures declined during critical adolescent years. These results suggest that students may struggle to perceive the interconnectedness between broader societal issues and their individual lives. The study highlights the importance of integrating future-oriented curriculum practices to foster spatial and temporal awareness and support students' identity formation and future planning. This research contributes to understanding the role of education in shaping young people's images of the future and their capacity to navigate complex societal challenges.*

## Keywords

Images of the Future; Future Thinking; Curriculum Practices; Adolescent Perspectives; Ethiopian Education

## Introduction

Images of the future can play a significant role in cultural change at personal and collective levels in society (Polak, 1974). Rubin & Linturi (2001) argue that images of the future have a powerful influence on individuals' or collectively on a group's behavior, decisions, and basis for their actions in the present. This study examines secondary school students' images of the future in Ethiopia. Paige & Lloyd (2016) argue that knowing the images young students hold about the future is a crucial source to inform the process of curriculum development and classroom instructional practices.

## Nature of images of the future

The nature of images of the future is complex and has many features. The first nature of images of the future is their production. An individual or group exist in a society can produce images of the future (Rubin & Linturi, 2001; Boulding, 1973). The creation of images of the future may emanate as the mixture of knowledge, awareness, values, beliefs, expectations, visions, opinions, hopes, and fears of individuals or societies shared in common (Son, 2013; Demneh & Morgan, 2018; Slaughter, 1991). Future images may also come as natural disposition (i.e. freethinking, purposive life-oriented thinking, and creative thinking) or through cultural interaction within social values (Slaughter, 1996), and it can be can be improved with education (Lloyd & Wallace, 2004).

The second nature of images of the future is related to their content. The content of images of the future may relate to individual issues or collectively to the political, social, economic, environmental, technological, legal, and religious issues. The contents of images of the future produced by an individual or group may vary from person to

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person and from society to society as a result of differences in past and present experiences, knowledge, technology, current realities, values, hopes, fears, future expectations, culture, geography, socio-economy, ages, sex and so on (Boulding, 1973; Rubin & Linturi, 2001). The contents of future images could be related spatially to a single person's life or collectively to local, national, or global issues and problems.

The third aspect of images of the future is the dissemination of the produced images. Images of the future created at an individual or group level can be shared at institutional, societal, national, or global levels (Rubin, 2013). Boulding (1973) explains that every public image starts in the mind of a single individual and only becomes a public image after it is disseminated and shared by a group. In disseminating images of the future, social interaction and media including the school curriculum can play crucial roles (Boulding, 1973; Polak, 1974). The shared images of the future then become collective images of the future among shared groups. Boulding (1973) argues that collective images of the future are interlinked with personal images of the future; however, not every personal image of the future is necessarily shared at group level, and unshared individual images have no influence on societal images.

The fourth aspect of images of the future is their influence and function. Polak (1974) claims that images of the future often originate from dominant elite groups within a society and begin to affect and govern societal behavior and actions once they are propagated and shared within larger groups. Shared collective images of the future in a society have various features and function. One characteristic of collective future images is that every society, whether consciously or unconsciously, participates in the production, transmission, and protection of their collective images. Without collective shared images, individuals cannot connect and participate meaningfully in social groups (Boulding, 1973). Images of the future can function as a cohesive force, binding individuals and society together so as they can strive to achieve common goals (Morgan, 2015). Collective images of the future may be embraced by many individuals within a group, though not necessarily by all, which can lead to the existence of competing future images within a society (Rubin, 2013). Clearly articulated and negotiated collective images of the future can function as agents of cultural change, foster social consensus, and help overcome cultural obstacles to progress (Demneh & Morgan, 2018).

Images of the future held by individuals or groups can influence their psychological states, fostering optimistic or pessimistic emotions (Heinajarvi, 2018; Holden, 1997; Lloyd & Wallace, 2004). Generally, positive and optimistic images of the future held by individuals or groups can play significant roles in promoting hopeful thinking, serving as a source of motivation, and guiding present behavior toward desired actions (Ahvenharju, 2022). In contrast, individuals who focus on pessimistic and negative future images may experience narrow thinking, poor psychological well-being, hopelessness, disempowerment, and a lack of confidence in their ability to influence future changes (Arnaldi, 2008; O'Connor & Cassidy, 2007).

The fifth aspect of images of the future is its temporal dynamism. Polak (1974) argues that a society's images of the future are dynamic; images produced at one point do not remain unchanged forever. Instead, they are continuously evaluated, renewed, and altered based on their outcomes, with shifts in these future images leading to changes in social culture. Boulding (1973) argues that while images of the future shape a society, society itself continually reshapes these images. Thus, images of the future held by individuals can be constantly reshaped and reorganized in response to new information, as well as feedback they receive from their choices, decisions, and actions (Rubin & Linturi, 2001; Paju, 2021).

**Previous empirical studies of young students' images of the future**

The primary aim of Futures Studies is not to predict the future, as the future does not yet exist, but rather to examine individuals' ideas and perceptions, or "images," of what the future might be (Dator, 2019). Extensive research has been conducted to understand how young students in developed countries envision the future. Studies on future perspectives among young people in developing nations, including Ethiopia, remain limited. For instance, Anguera & Santisteban (2016), Hutchinson (1999), Eckersley (1999), and Hicks (1996) examined the future images held by young students in countries like Barcelona, Australia, and the UK. Their findings showed that while most young students held pessimistic views on national and global issues, they remained optimistic about their personal futures. The results of these studies revealed that students often anticipated negative futures concerning issues such as pollution, environmental degradation, wealth inequality, unemployment, conflict, crime, and economic instability

at both national and global levels. Research by Hicks & Holden (2007), Hutchinson (1994), Tepperman & Curtis (1995), Hicks (2002), and Gidley et al. (2004) suggests that the contrast between students' optimistic expectations for their personal lives and their pessimistic views on larger societal issues may result from the media's frequent portrayal of negative and fearful future scenarios. This contrast also highlights a sense of disempowerment among young people regarding their ability to shape a positive future. The studies largely reflect the perspectives of youth in developed countries and may not fully capture the context of Ethiopia. Bell & Mau (1971) argue that individuals' future images are shaped by various factors, including geography, national realities, politics, culture, values, age, gender, and life experiences.

In Ethiopia, there is a scarcity of empirical research on how young students envision the future, with most existing studies focusing on students' psychological challenges. For example, Reta et al. (2020), Shishigu (2018), and Anely (2020) investigated the correlation between test anxiety and academic achievement among secondary school students, revealing that anxiety significantly contributes to underachievement and low academic performance. Amare et al. (2018) and Shiferaw et al. (2006) explored psychosocial issues in secondary schools through a comparative cross-sectional approach, finding high rates of depressive symptoms, suicidal thoughts, and suicide attempts among students. The above studies did not examine the relationship between students' psychological issues such as anxiety, depression, suicidal ideation, and low self-esteem and their personal images of the future. Understanding the sources or factors shaping students' future perspectives is essential for designing effective interventions. Although some psychological factors linked to students' future outlooks were touched upon, both the concept of future image and its shaping factors remain unexamined in Ethiopia. Studies from other countries suggest that adolescent psychological issues are often linked to future uncertainties and negative future outlooks (Hammad, 2016; Rabei et al., 2020; Miloyan et al., 2014; Zaleski, 1996). Addressing these gaps, this study examines secondary students' (grades 11 and 12) future orientation, their future images regarding personal, national, and global issues, and the key factors shaping these future perspectives. This study aims to answer three main research questions.

1. What kind of future-orientation do grades 11 and 12 students have?
2. What images of the future so students in grades 11 and 12 have on personal, national, and global issues?
3. What are the main factors that influence students' future images constructions?

**Conceptual frameworks in the process of future images formations**

Images of the future serve as a mental tool that allows individuals to navigate potential future scenarios (Rubin et al., 2001) and is deeply connect to knowledge and learning processes (Polak, 1974). These images are shaped within society through family, religious institutions, cultural norms, media, and school curricula (Bell et al., 1971; Boulding, 1973). Bell & Mau (1971) identify three foundational elements that drive the creation of future images: temporal awareness, spatial awareness, and values awareness. Temporal awareness refers to an individual's ability to mentally connect past, present, and future events in cognitive, affective, and emotional ways (Nurmi, 1991; Trommsdorff, 1986). Spatial awareness involves understanding the relationships between oneself, society, and the physical world (Anthamatten, 2010; Shin et al., 2019). The value dimension enables individuals to assess and judge the desirability of various human actions, thereby shaping their future images. These cognitive tools play a critical role in constructing personal and collective future images. Fig. 1 shows the relationships of basic elements that help the creation of images of the future.

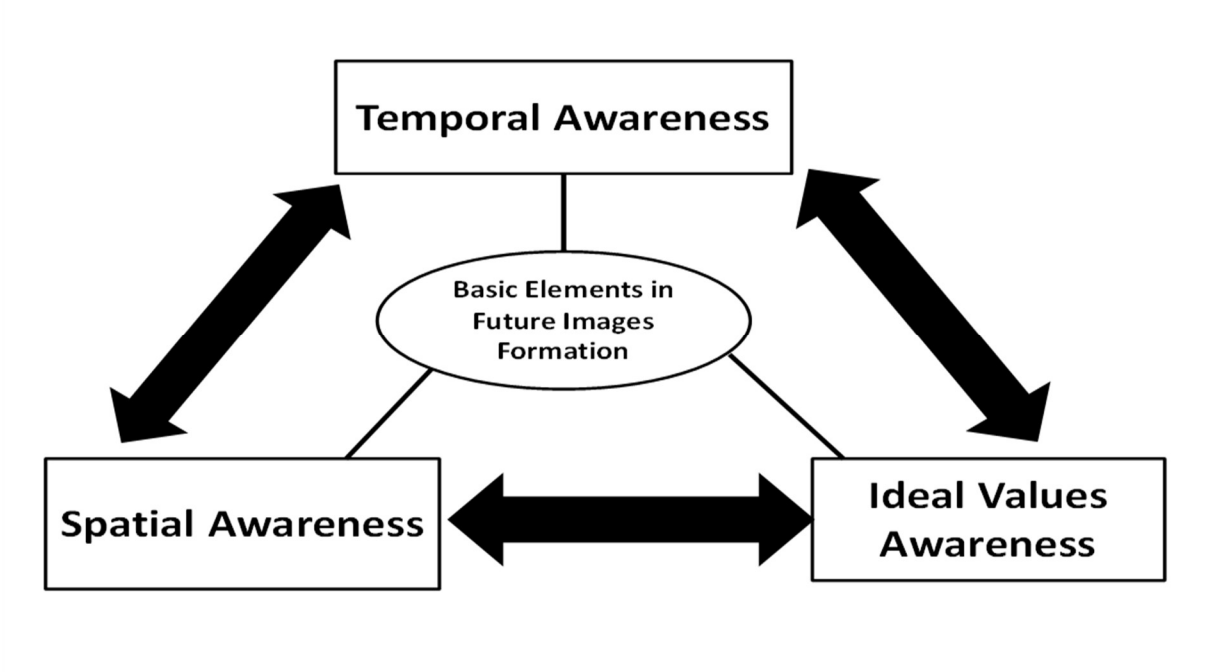


**Fig. 1:** The basic cognitive tools that can help human in the formation of images of the future

## Methodology

### Methods and Samples

This study utilized a survey research design in five secondary schools within the West Hararghe Zone of the Oromia Regional State in Ethiopia. The schools were selected through simple random sampling from the available secondary schools in the zone. A total of 500 students were chosen as a sample from a population of 24,732 students, with sample size determined using the Krejcie & Morgan (1970) sample size determination tables. Non-proportionate stratified sampling was employed to ensure equal distributions among the respondents, who were categorized by sex, grade, and department. Questionnaires were then distributed to the selected respondents, yielding a response rate of 443 completed questionnaires, or 88.6%.

### Questionnaires

Different types of closed-ended questionnaires were employed to identify students' level of future orientation, images of the future they held in their own lives, the problems of national and global issues, and agencies that influenced their future image construction. Five different scales of questionnaire items were developed to collect various information from the students. These items are:

**Future orientation items:** the first scales of the questionnaire included items that can measure students' future orientation using 5-point Likert scales on which the respondents specify their level of agreement or disagreement for a series of items (Example: I just live for today than worry about tomorrow, I do not think I can control my future…). The items of the questionnaire were adapted from the instruments previously developed and used by Hideg & Novaky (2010) to measure students' future orientation.

**Images of the future items:** Grounded in the theory of images of the future, the questionnaire was designed to explore students' expectations of what lies ahead across personal, national, and global dimensions. The second scale focused on students' personal images of the future, using a 5-point Likert scale to assess the degree of optimism or pessimism reflected in their responses (e.g. "My future seems dark to me"; "I can look forward to more good times

than bad times in my life").

To ensure conceptual alignment with the study's aims, items for this scale were adapted from Ginevra et al. (2017), whose work also draws on future-oriented psychological constructs. The third and fourth scales extended the analysis to wider contexts, capturing students' future expectations about national (Ethiopian) and global issues. These items were measured using a 4-point ranking scale and were adopted from instruments previously developed and validated by Eckersley (1999). Together, these scales offer a multidimensional perspective on how students visualize and evaluate the future, both individually and collectively.

**Factors influencing students' future images formation items:** the fifth scale of questionnaires included ranking items designed to identify agencies that influence students' future images construction. The items in the questionnaire were developed based on the reviews of the literature that described the factors that can influence students' images and future images construction.

### Reliability and Validity of the Instruments

A pilot study was conducted to test the reliability and validity of the baseline questionnaires. To ensure the reliability of the questionnaires, Cronbach's alpha coefficients were calculated as shown in table 1.

**Table 1:** Reliability Test Result of the Instruments

| No. | Sub-scales | Confidence level | Pilot Study | | Main study | |
|---|---|---|---|---|---|---|
| | | | No. of items | Cronbach Alpha | No. of items | Cronbach Alpha |
| 1 | Students' Future Orientation (FO) | 95% | 7 | 0.543 | 5 | 0.513 |
| 2 | ***Students' Personal Future Life Expectations*** | | 8 | 0.60 | 7 | 0.70 |

Based on the results of the pilot test, appropriate improvements were made to rephrase items in the questionnaires that appeared vague to respondents. However, modifications to the scale measuring students' future orientation did not enhance its effectiveness in assessing expectations for their personal future lives. According to Hinton et al. (2014, p. 356) and Tjondro et al. (2019, p. 600), Alpha score values ranging from 0.5 to 0.75 are generally accepted as indicating a moderately reliable scale. Given this criterion, the study proceeded to use these scales for analysis and interpretation.

## Results

### Descriptions of Participant Demographic Characteristics

A total of 443 sample secondary school students participated in this study. Table 2 shows the frequency and percentage of the demographic characteristics of the participants.

**Table 2:** Summary of Demographic Characteristics of the Participants (n=443)

| Demographic variables of participants | | Frequency of respondents | % of respondents |
|---|---|---|---|
| **Grade** | Grade 11 | 233 | 52.60 |
| | Grade 12 | 210 | 47.40 |
| **Department** | Natural | 225 | 50.80 |
| | Social | 218 | 49.20 |
| **Sex** | Male | 273 | 61.63 |
| | Female | 170 | 38.37 |
| **Religion** | Islam | 257 | 58.01 |
| | Christian | 183 | 41.31 |
| | Other | 3 | 0.68 |
| **Place of Birth** | Urban | 227 | 51.24 |
| | Rural | 216 | 47.76 |
| **Age** | 16.00 | 15 | 3.39 |
| | 17.00-19.00 | 342 | 77.20 |
| | 20.00-22.00 | 80 | 18.06 |
| | 23.00-25.00 | 5 | 1.13 |
| | Above 25.00 | 1 | 0.22 |

As shown in Table 2, the sample demonstrates similar distributions across department, grade level, place of birth, and religion. However, there were more male participants, with 273 (62.0%) students, compared to 170 (38%) female students. Additionally, it is noteworthy that 342 (77.0%) of the participants were between the ages of 17 and 19, indicating that most of the respondents were at a critical stage of adolescence.

**Future Orientation**

Students were asked to indicate their level of agreement or disagreement on a 5-point Likert scale (5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, and 1 = Strongly Disagree) to assess their future orientation. Descriptive statistics revealed that a significant number of students held pessimistic views regarding their future: 67.0% indicated that they did not believe it was worthwhile to think deeply about their future lives; 71.0% expressed doubt about their ability to influence the future through their plans and efforts; and 67.0% felt that their future was largely determined by external forces. Table 3 summarizes the findings related to students' future orientation. To evaluate whether students were future-oriented, the study employed a one-sample t-test using a test value of 4.0 (indicating that the mean score should be 4 or above on the items), which served as a benchmark against the population mean score.

**Table 3:** One Sample t-test on students' future orientation

| Variable | ***N*** | ***M*** | ***SD*** | ***Test value*** | ***t*** | ***p*** | ***95% confidence interval of difference*** | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | ***Lower*** | ***Upper*** |
| **Future Orientation** | 443 | 3.91 | 0.71 | 4.0 | -2.70 | .007** | -.158 | -.025 |

***p*<.05

The inferential analyses indicated a statistically significant difference between students' ratings of their level of future orientation and the test value "$t$ (442) = -2.70, $p$=.007". "The mean score for students' future orientation was found to be ($M$=3.91, $SD$=0.71), which is lower than the test value of 4.0". This suggests that students' future orientation is not well developed. Furthermore, the study sought to identify potential differences in future orientation based on sex, religion, place of birth, and department using an independent sample t-test.

**Table 4:** Independent-test of future-orientation (Gender, Grade, Department, Religion and Place of Birth)

| | ***Group statistics*** | | | | ***Levene's test for equality of variance*** | | ***t-test for equality of means*** | | | ***95% confidence interval of difference*** | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Categories | *N* | *M* | *SD* | *F* | *sig.(2-tial)* | *t* | *df* | *p* | *Lower* | *Upper* |
| Gender | M | 273 | 3.9392 | 0.68725 | 0.526 | 0.469 | 1.141 | 441 | 0.255 | -.057 | 0.216 |
| | F | 170 | 3.8600 | 0.74670 | | | | | | | |
| Grade | 11 | 233 | 3.9863 | 0.67094 | 5.056 | .025 | 2.416 | 422.759 | .016** | .031 | 0.296 |
| | 12 | 210 | 3.8229 | 0.74490 | | | | | | | |
| Department | Natural | 225 | 4.0044 | 0.67386 | 3.046 | .082 | 2.901 | 441 | .004** | .063 | 0.326 |
| | Social | 218 | 3.8101 | 0.73572 | | | | | | | |
| Religion | Muslim | 257 | 3.9393 | 0.72504 | .021 | 0.884 | 1.038 | 438 | 0.300 | -.064 | 0.207 |
| | Christian | 183 | 3.8678 | 0.69519 | | | | | | | |
| Place of Birth | Urban | 227 | 3.9692 | 0.66140 | 4.965 | .026 | 1.831 | 426.881 | .068 | -.009 | 0.256 |
| | Rural | 216 | 3.8454 | 0.75574 | | | | | | | |

***p*<.05

As illustrated in Table 4, the findings indicated that there are no statistically significant differences in future orientation based on gender "t (441) = 1.141, p = 0.255", religion "t (438) = 1.038, p = .30", place of birth "t (426.881) = 1.831, p = .068" as determined by independent t-test. However, a statistically significant difference was found based on grade level, with "mean scores of (M=3.99, SD=0.67) for grade 11 and mean score (M=3.82, SD=0.75) for grade 12", yielding a significance level of "t (422.759) = 2.416, p = .016" with equal variance not assumed. Significant difference was observed between departments, "with mean scores of (M=4.004, SD=0.67) for Natural Science students and (M=3.8, SD=0.74) for Social Science students", resulting in a significance level of "t (441) =2.901, p = .004" with equal variance assumed. Therefore, grade 11 Natural Science students demonstrated a higher level of future orientation compared to grade 12 Social Science students.

**Personal Future Life Expectations**

Students responded to 5-point Likert-scale items to indicate their level of optimistic or pessimistic expectations regarding their personal futures. The data were analyzed using a one-sample t-test to determine whether students hold optimistic or pessimistic future images, with a test value of 4.0 (indicating that the mean score should be 4 or above on the items). This test value serves as a benchmark against the population average score to ascertain whether the students are generally optimistic or pessimistic. Table 5 presents the summarized results of the data.

**Table 5:** One Sample t-test on Students' images of the future on their personal lives

| Variable | ***N*** | ***M*** | ***SD*** | ***Test value*** | ***t*** | ***p*** | **95% confidence interval of difference** | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | ***Lower*** | ***Upper*** |
| Personal Future Expectation | 443 | 4.0748 | 0. 653 | 4.0 | 2.41 | .016* | ***.014*** | ***.136*** |

**p<0.05

The findings indicated a statistically significant difference between students' "mean score (*M*=4.0748 & *SD*=0. 65) for future expectations regarding their personal lives and the test value of 4.0", and "*t* (442) = 2.41, *p*=.016". This suggests that most students exhibited optimistic images of their future, anticipating a positive and bright personal future.

Furthermore, the investigation examined the potential differences in students' personal future images based on sex, religion, place of birth, grade level, and department using independent t-tests for mean comparison. The results revealed no statistically significant differences among these categories regarding personal future expectations. However, a statistically significant difference was observed based on age "*F* (432) =2.023, *p* = .030" when analyzed using a one-way ANOVA test, as shown in Table 6

**Table 6:** ANOVA test on the future images of personal lives based on the ages of students

| | ***Sum of Squares*** | ***df*** | ***Mean Square*** | ***F*** | ***Sig.*** |
|---|---|---|---|---|---|
| Between Groups | 8.440 | 10 | .844 | 2.023 | .030** |
| Within Groups | 180.264 | 432 | .417 | | |
| Total | 188.704 | 442 | | | |

**$p<0.05$

Students' optimistic future images tend to decline during the critical ages of adolescence, specifically between 17 and 20 years old, as illustrated in Figure 2.

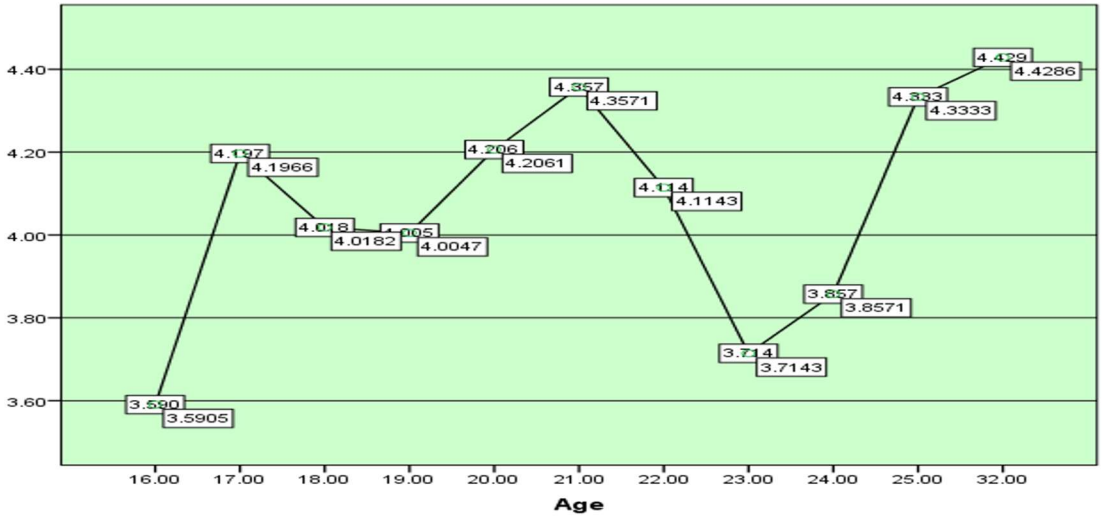


**Fig. 2:** Mean of students' future expectations with respect to their ages

**National Future Expectations**

Students were asked to respond to a 4-point ranking scale regarding their perceptions of future images related to national issues. The scale included the following options: 4 = better than now, 3 = the same as now, 2 = worse than now, and 1 = I don't know. The students' responses were analyzed using frequencies and percentages, as presented in Table 7.

**Table 7:** Frequency and percentages of students' response on national images of the future (n=443)

| No. | **National Issues** | **Better than now** | **Same as now** | **Worse than now** | **I don't know** |
|---|---|---|---|---|---|
| 1 | Economic development in Ethiopia | 224(51%) | 35(8%) | 101(23%) | 83(19%) |
| 2 | The gap between rich and poor in Ethiopia | 64(14%) | 74(17%) | 161(36%) | 144(33%) |
| 3 | Cost of living in Ethiopia | 77(17%) | 41(9%) | 229(52%) | 96(22%) |
| 4 | Ethnic conflict in Ethiopia | 95(21%) | 64(14%) | 168(38%) | 116(26%) |
| 5 | Justice in law, fairness in economy and equality of cultures of peoples in Ethiopia | 199(45%) | 75(17%) | 92(21%) | 77(17%) |
| 6 | Conditions of unemployment in Ethiopia | 139 (31%) | 61(14%) | 171(39%) | 72(16%) |
| 7 | Crime and violence in Ethiopia | 111(25%) | 56(13%) | 201(45%) | 75(17%) |
| 8 | Internal war and conflicts in Ethiopia | 101(23%) | 58(13%) | 169(38%) | 115(26%) |
| 9 | Breakdown of society's moral values in Ethiopia | 100(23%) | 70(16%) | 183(41%) | 90(20%) |

| | | | | | |
|---|---|---|---|---|---|
| 10 | Corruption of politicians/officials in Ethiopia | 93(21%) | 62(14%) | 215(49%) | 73(17%) |
| 11 | Effects of pollution of air and water in Ethiopia | 105((24%) | 62(14%) | 195(44%) | 81(18%) |
| 12 | Political stability and democratic values in our society | 161(36%) | 75(17%) | 134(30%) | 73(17%) |
| 13 | Impact of climate change in Ethiopia | 88(20%) | 68(15%) | 197(45%) | 90(20%) |
| 14 | Problems of food shortage, famine, and poverty with respect to population growth in Ethiopia | 119(27%) | 51(12%) | 198(45%) | 75(17%) |
| 15 | Terrorist attacks in Ethiopia | 86(19%) | 59(13%) | 203(46%) | 95(21%) |
| 16 | Technological progress in Ethiopia | 246(56%) | 62(14%) | 73(17%) | 62(14%) |
| 17 | Religious and ethnic tolerance in Ethiopia | 204(46%) | 73(17%) | 114(26%) | 52(12%) |
| 18 | Spread of pandemics/endemics and other types of diseases in Ethiopia | 92(21%) | 69(16%) | 160(36%) | 122(28%) |
| Total % | | **29.0%** | **14.0%** | **37.0%** | **20.0%** |

Table 7 presents the calculated cumulative averages of students' responses regarding their perceptions of national issues. The results indicated that "nearly 29.0% of students expect a better future, 14.0% believe the future will be the same as now, 37.0% anticipate a worsening future, and 20.0% responded that they "do not know" what the future holds". These findings revealed "a significant portion of students (37.0%) held pessimistic views about the future of national issues".

Students expressed notable concerns about various national issues in Ethiopia, including "the cost of living (52.0%), crime and violence (45.0%), a breakdown of moral values in society (41.0%), corruption among officials (49.0%), pollution effects (44.0%), climate change impacts (45.0%), food shortages, famine, and poverty related to population growth (45%), and terrorist attacks in Ethiopia (46.0%)". Conversely, students exhibited relatively optimistic views regarding national issues such as "economic development (51%), justice and fairness in law and the economy (45.0%), technological and industrial advancements (56.0%), and religious and ethnic tolerance in Ethiopia (46.0%)".

The study examined whether optimistic images of the future regarding national issues varied between Natural and Social Science students using cross-tabulation. The findings revealed that "Social Science students (53.0%) displayed more optimistic images regarding economic development compared to Natural Science students (48.0%)". However, "Natural Science students (56.0%) showed slightly greater optimism about technological progress in Ethiopia than their Social Science counterparts (55.0%)" as depicted in Figure 3.

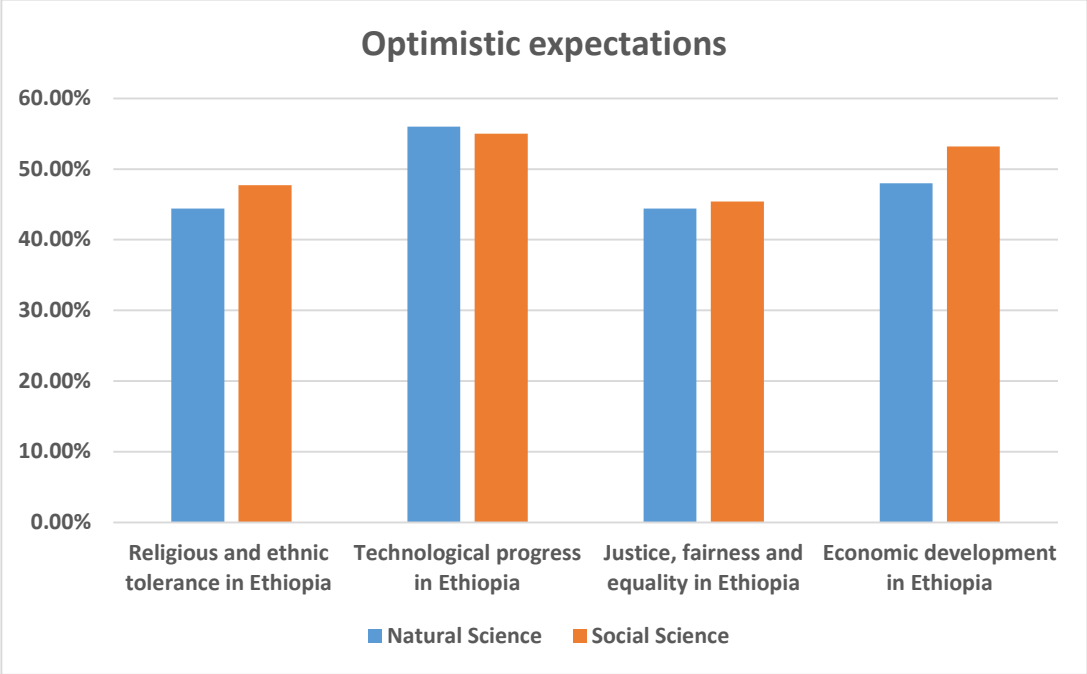


**Fig. 3:** Optimistic expectations of students on some of national (Ethiopia) issues

**Global Future Expectations**

Students were asked to respond to a 4-point scale regarding their perceptions of future images related to global issues. The scale included the following options: 4 = better than now, 3 = the same as now, 2 = worse than now, and 1 = I don't know. The students' responses were analyzed using frequencies and percentages, as presented in Table 8.

**Table 8:** Frequency and percentages of students' response on global images of the future (n=443)

| No. | **Global Issues** | **Better than now** | **Same as now** | **Worse than now** | **I don't know** |
|---|---|---|---|---|---|
| 1 | The gap between population growth and food security on the world | 116(26%) | 60(14%) | 192(43%) | 75(17%) |
| 2 | The impact of rapid population growth on the environment around the world | 57(13%) | 57(13%) | 259(59%) | 70(16%) |
| 3 | The increase of migration of people from poor country to rich countries | 72(16%) | 71(16%) | 223(50%) | 77(17%) |
| 4 | Spread of unstoppable pandemics diseases on the world | 73(17%) | 72(16%) | 193(44%) | 105(24%) |
| 5 | Religious extremism in various countries | 78(18%) | 66(15%) | 203(46%) | 96(22%) |
| 6 | Economic competitions between countries may lead to third world war | 85(19%) | 67(15%) | 170(38%) | 121(27%) |
| 7 | Global warming and climate change across the World | 79(18%) | 67(15%) | 211(48%) | 80(19%) |
| 8 | Population growth and availability of land for agriculture on the world | 70(16%) | 69(16%) | 225(51%) | 79(18%) |
| 9 | Environmental pollution such as soil toxic, water and air contamination by chemicals on the world | 74(17%) | 60(14%) | 253(57%) | 56(13%) |
| 10 | The negative impact of the richest countries on the development of poor countries | 73(17%) | 68(15%) | 226(51%) | 76(17%) |
| Total % | | **18.0%** | **14.0%** | **49.0%** | **19.0%** |

Table 8 presents the calculated cumulative averages of students' responses regarding their perceptions of global issues. The results indicated that "nearly 18.0% of students expected a better future compared to the present, while 14.0% believed there will be no changes in the future. In contrast, 49.0% anticipated a worsening future concerning global problems, and 19.0% expressed uncertainty about future changes, whether positive or negative".

These findings indicated that "a significant majority of students (49.0%) held pessimistic views regarding global issues and problems". They expressed substantial concerned over various challenges, including "the impact of rapid population growth on the environment (59%), migration from poorer countries to wealthier nations (50%), reductions in agricultural production (51.0%), global warming and climate change (48.0%), pollution (57%), and the adverse effects of wealthy countries on the development of poorer nations (51.0%)". In contrast, students exhibited relatively limited optimism about global issues, "with approximately 26.0% believed in potential improvements regarding the gap between population growth and food security in the future".

The findings explored whether pessimistic views regarding global issues varied between Natural and Social Science students through cross-tabulation analysis. The results revealed that concerns about global issues differ between the two groups. As illustrated in Figure 4, "Social Science students (54.0%) exhibited greater pessimism regarding the problem of reduced agricultural food production compared to Natural Science students (48.0%)". Conversely, "Natural Science students (60.0%) demonstrated higher concern about the impact of population growth on the environment than their Social Science counterparts (57.0%)".

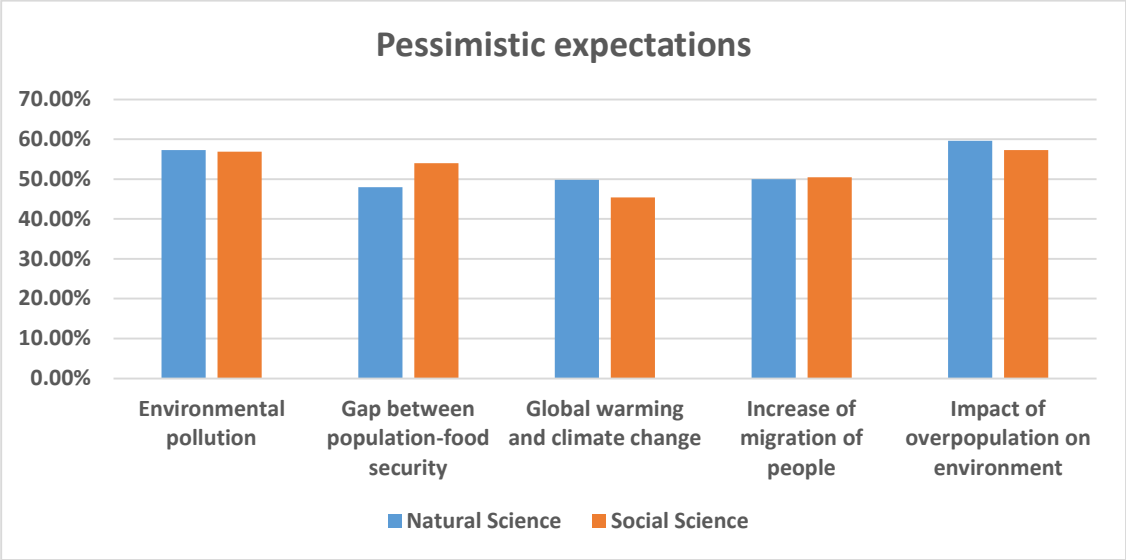


**Fig. 4:** Pessimistic expectations of students on some of global issues

### Factors Influencing Future Images Formation

Students were asked to respond to a four-point rating scale regarding how various agencies influence their formation of future images. The scale included the following options: 4 = very influential, 3 = somewhat influential, 2 = slightly influential, and 1 = not influential at all. Table 9 presents the summarized mean averages of students' responses for each of the four alternatives.

**Table 9:** Mean score of students' response on the agencies (n=443)

| Factors | *M* | *SD* |
|---|---|---|
| Bible/Quran Teachings | 3.56 | 0.89 |
| Curriculum Textbooks | 3.39 | 0.85 |
| Family | 3.26 | 0.93 |
| Media | 3.24 | 0.91 |
| Society | 3.15 | 0.95 |
| Classroom teaching | 3.11 | 0.96 |
| Personal Experiences | 3.10 | 0.96 |
| Fictions books and Magazines | 3.09 | 0.96 |

As shown in Table 9, "Bible/Quran teachings (M = 3.56, SD = 0.89) and curriculum textbooks (M = 3.39, SD = 0.85) are the most significant factors influencing students' future images. In contrast, students' personal experiences (M = 3.10, SD = 0.96) and fiction books and magazines (M = 3.10, SD = 0.96) are among the least influential factors in shaping students' perceptions of their future". Figure 5 illustrates the varying levels of influence from all identified agencies on students' future image formation.

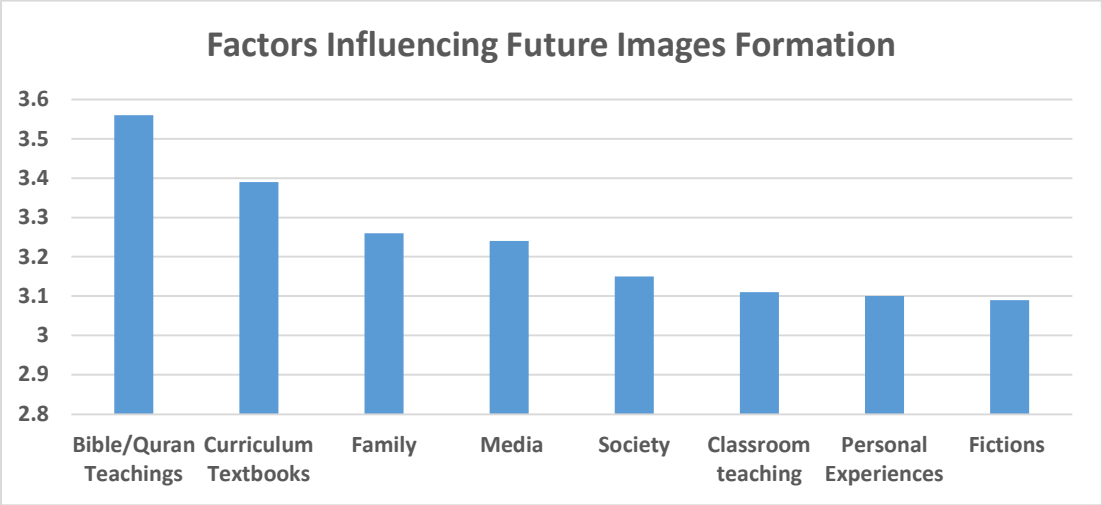


**Fig. 5:** Ranks of agencies that influenced students' future images formation

## Discussion

The findings of this study indicated that "students' future orientations are underdeveloped, as evidenced by a population mean score of (M=3.91, SD=0.71), which is lower than the test value mean of 4.0, and t (442) = -2.70, p = .007". A significant proportion of students (67.0%) reported that "they do not believe it is worthwhile to think deeply about their future, while 71.0% felt uncertainty about their ability to influence the future". The findings indicated "67.0% felt that their future is largely determined by external factors rather than their own plans and efforts". These findings aligned with previous research, such as the Eurobarometer (2015) and Hicks (1996), which noted that many young students struggling with imagining their futures, perceive it as uncontrollable, and lack the capacity to think about future possibilities. The study also found no statistically significant differences in future orientation based on gender, age, religion, or birthplace. Significant differences observed between grade levels and departments, with grade 11 students demonstrating a higher level of future orientation than grade 12 students, and Natural Science students showing more future-orientation when compared to Social Science students. These differences may stem from variations in exposure to time concepts through the school curriculum (e.g., in physics) in Natural Science, as well as increased anxiety levels among grade 12 students compared to those in grade 11.

The findings of the study indicated that students have more optimistic expectations regarding their future lives, with a significant majority (82.0%) expressing positive outlooks and believing that good things are likely to happen in their lives. According to Stoddard and Pierce (2015), future expectations encompass individuals' positive views of the future, anticipating specific favorable outcomes, such as leading a happy life. Hamvai & Piko (2011) note that a generalized positive expectancy for the future is strongly associated with improved health outcomes and adaptive coping strategies. This finding is important as it sheds light on the psychological well-being of secondary school students. Previous research has shown that young students' positive future expectations correlate with their academic achievements, motivation, pro-social behaviors, and capacity to set future life goals (Braojos, 2015; Nurmi, 1991; Poole et al., 1986; Trommsdorff, 1986; Zimbardo et al., 1999). Stoddard & Pierce (2015) argue that adolescents with positive future expectations are more likely to experience optimal development and successfully transition into adulthood.

The findings of this study indicated that "approximately 18.0% of students showed pessimistic future expectations regarding their lives", which has negative implications for their psychological and social well-being. Previous researches revealed that adolescents with negative future expectations are at a higher risk of developing anxiety, depression, emotional disorders, aggressive behaviors, hopelessness, engage in criminal and antisocial behaviors, struggle with alcohol addiction, exhibit low motivation and academic success, and suicidal thoughts (Kovac et al., 2007; Seginer et al., 2004; Seijts, 1998; Wills et al., 2001). Several studies in Ethiopia have shown

that a significant number of secondary school students face psychological problems such as anxiety, which contributes to underachievement and poor performance, along with depression and suicidal attempts (Amare et al., 2018; Anely, 2020; Reta et al., 2020; Shiferaw et al., 2006; Shishigu, 2018). These psychological problems among students may be closely related to their pessimistic expectations for the future.

This study found students' optimistic future expectations for their personal lives decline during the critical age range of 17 to 20 years (see Fig. 2). Previous research supports these findings; for example, Eckersley (1997) and Hicks (1996) discovered that young people's optimistic expectations for their personal futures tend to decrease as they enter late adolescence. Researchers have proposed various reasons for this decline in optimism during late adolescence. Zou et al. (2016) argue that the rapid biological, social, and psychological changes occurring during adolescence can induce stress in youths and undermining their optimistic expectations for the future. Klaczynski (2017) argues that the decline in optimistic expectations from early to late adolescence may stem from a reduction in unrealistic optimism and advanced their cognitive abilities to make realistic assessments of their futures. These findings underscore the importance of interventions supporting identity formation and future planning during this stage.

This study disclosed that a significant portion of students, specifically "nearly 37% regarding national issues and 49% concerning global issues, expect current conditions and problems will worsen in the future". This indicates that students possess less optimistic views about national (Ethiopian) and global issues compared to their expectations for their personal future. These findings aligned with previous research by Hicks (1996), Eckersley (1997), Oscarsson (1996), Holden (2006), and McElwee & Brittain (2009), which found that young students tend to be more optimistic about their personal lives while exhibiting pessimism toward national and global issues. Poole and Cooney (1986) argue that the discrepancy of students being more optimistic about their personal future but pessimistic about broader national and global challenges can be attributed to their inability to perceive themselves in relation to the outside world, which they describe as a lack of perceived interconnectedness. This study infers students' spatial awareness may not be sufficiently developed to grasp the interrelatedness and interdependence of the global systems. This lack of understanding could hinder their ability to recognize how national and global issues might impact their personal lives both now and in the future. This study suggests that fostering spatial awareness and a sense of interconnectedness may be crucial for helping students develop a more holistic view of the world and their place within it.

The findings of this study also indicated that Bible/Quran teachings and school curriculum ranked first and second, respectively, as the agencies that most significantly influence students' future image construction. This finding contrasts with previous empirical results from Anguera (2016), which suggested that students' images of the future are primarily shaped by information gained through mass media, particularly television. In contrast, the current study found that religious teachings (Bible/Quran) were rated as the foremost influence on students' perceptions of the future. Several empirical studies highlight the dual implications of eschatological images on individuals' future orientations. For instance, Holmes & Kim-Spoon (2017) found a positive correlation between religiousness and positive future orientation, suggesting that eschatological images can foster higher self-esteem, positive emotional states, and agreeableness. Conversely, as noted by Gidley (2017) and Vieira (2010), eschatological views may also engender feelings of helplessness, disempowerment, and a lack of motivation to effect change in future events. The findings indicated that the students ranked curriculum textbooks as the second most influential agency in shaping their future images. Unlike religious teachings, school curricula are primarily grounded in secular thinking, aiming to cultivate students' visions and aspirations to become constructive individuals and citizens within society (Halpin, 2003; Morgan, 2015). This distinction underscores the complexity of influences on students' future perceptions, where both religious and educational frameworks play critical roles but do so in different ways.

Neblett & Cortina (2006) and Seginer & Shoyer (2012) emphasize that parental support plays a crucial role in developing adolescents' positive future images. The findings of this study verify this notion, revealing that family, media, and societal influences (specifically peers) ranked as the third, fourth, and fifth agencies, respectively, that shape students' future image construction. This aligns with earlier research by Malmberg (2001), cited in Crespo et al. (2013), which found that adolescents consider their family to be the most significant source of information regarding future planning, followed by peers, mass media, and educational institutions. Interestingly, the results of

the current study indicate that teachers' classroom instructional practices had a lesser impact on shaping students' future images compared to other influences, such as religious teachings, curriculum contents, family, and media. This finding suggests that while teachers play an essential role in the educational landscape, their influence may not be as pronounced as that of familial and societal factors.

The finding of this study revealed that fiction books and magazines were ranked as the least influential agencies in shaping students' future images. Significant researches indicated that fiction, particularly science fiction, plays a vital role in fostering students' imagination, critical thinking, creative skills, and temporal consciousness, as well as enhancing their understanding of social changes and enabling them to envision alternative futures (Lombardo, 2015; Moraes et al., 2021; Surmeli, 2012). Researchers such as Moraes et al. (2021), Hollenbeck (2020), and Raham (2004) advocate for integrating science fiction into school curricula as a powerful instructional tool. They argue that exposure to science fiction can help students develop futuristic images, both utopian and dystopian, and increase their capacity to explore alternative futures.

## Implications

The findings of this study indicated students' future orientations are underdeveloped, and this may lead them to psychological and social challenges. While most students were optimistic about their personal futures, they exhibited pessimistic views regarding national (Ethiopian) and global issues. This indicate that students have limited spatial awareness of how broader societal challenges impact their lives. A decline in optimism during critical adolescence may be linked to increased anxiety. Significantly, religious teachings (Bible/Quran) ranked as the most influential factor in shaping students' future images, which could foster deterministic views of the future. To address these issues, educational practices should integrate future-oriented content, promote open-ended activities, and encourage critical thinking while balancing religious teachings. These recommendations aim to enhance students' future consciousness to equip them to navigate personal and societal challenges effectively. A future oriented curriculum can empower students to envision and pursue positive outcomes in their lives and society.

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