



A Comparative Analysis of Secondary Education Curricula in Iran and Türkiye in Promoting Childbearing

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ARTICLE INFO	ABSTRACT
<p>Received: 13 December 2024 Revised: 14 January 2025 Accepted: 09 June 2025 Online: 07 June 2026</p>	<p>The present study aimed to compare the secondary school curriculum in Iran and Türkiye with respect to the promotion of childbearing. The study employed a qualitative comparative approach using Bereday's model, and the countries were selected based on the strategy of "most similar social systems with different educational outcomes." The findings indicated that both countries emphasize the importance of family and moral values within their philosophical foundations of education. Moreover, shared educational objectives were identified in both curricula, including the enhancement of responsibility and preparation for future life. The content of the two curricula was also similar in addressing reproductive health, family health, and demographic issues. However, the two curricula differed in their philosophical orientation, particularly regarding the extent to which religion is incorporated. In addition, the goals of fostering critical thinking and problem-solving skills were more strongly emphasized in the Turkish curriculum than in the Iranian curriculum. Certain courses, such as <i>Family in Social Life</i> in Türkiye and <i>Ahkam</i> (Islamic rulings) in Iran, were also identified as distinctive curricular differences. Based on the findings, it is recommended that topics such as genetics, reproductive health, and the economic and social dimensions of childbearing be incorporated into secondary school curricula in both countries. Furthermore, curriculum planners in Iran are advised to place greater emphasis on teaching skills such as critical thinking, decision-making, problem-solving, and awareness of the challenges of married life across different subjects. Curriculum planners in the Turkish educational system are also encouraged to pay greater attention to the religious dimensions of childbearing, sex education, and health education during natural crises and disasters.</p>
<p>KEYWORDS</p> <p>Curriculum Secondary Education Population Policy Childbearing</p>	

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1. Introduction

Population and its growth trajectory, as one of the fundamental components of strengthening national power, plays a decisive role in the economic, political, and social development of countries (Lu, 2024). Over the past three decades, the significant decline in fertility rates has become one of the most critical demographic challenges worldwide. Many families postpone childbearing for various reasons, while the proportion of individuals choosing a childfree lifestyle is steadily increasing. These changes, particularly in developed and developing countries, have contributed to declining fertility rates, population aging, rising retirement rates, labor shortages, and reduced economic growth and productivity (Ranjbar et al., 2024).

Childbearing has weakened under the influence of multiple factors. The rapid expansion of modernism and the dominance of individualistic culture (Attarzadeh, 2023), unfavorable economic conditions, the expansion of social communication networks, increased emotional divorce among couples, and the preference for comfort-oriented lifestyles over responsibility (Nematian & Noghani Dokht Bahmani, 2021) are among the factors influencing changes in fertility intentions. In addition, individual factors—such as lack of motivation, preparedness, and planning for childbearing (Amerian et al., 2016)—have also contributed to declining fertility tendencies. Some studies further indicate that decisions regarding childbearing are increasingly influenced by social values and emotional factors rather than economic considerations (Holland & Keizer, 2015; Chauhan et al., 2021).

In recent decades, population policies and childbearing have been extensively examined across different countries. Internationally, recent studies have focused on emerging trends in fertility policymaking. Li (2025), in a study conducted in China, investigated the impact of subjective well-being on fertility intentions and reported variations across different income groups. Harnett et al. (2025), through an examination of school contexts, identified barriers such as inadequate teacher training, lack of appropriate resources, discomfort, and low self-confidence in teaching topics related to reproductive health. These barriers have reduced the effectiveness of formal school education despite the inclusion of fertility-related issues in the curriculum.

The study conducted by Raj and Mani (2025) also demonstrated a significant relationship between awareness of sex education, attitudes toward it, and the mental health of secondary school students—a relationship that may indirectly influence fertility behaviors and future childbearing decisions. Likewise, Dong et al. (2024) examined cognitive and communicative processes involved in the formation of misconceptions regarding reproductive health and analyzed the roles of social stigma and information overload.

In India, Purohit (2023) emphasized that population growth may represent an opportunity for economic development, while simultaneously requiring intelligent policies in the fields of employment and productivity. Wang (2023) further demonstrated that higher levels of education, due to changing priorities, increased social awareness, and enhanced occupational status, tend to reduce the inclination toward childbearing.

In Türkiye, Kabaklı Çimen (2022) examined changes in women's fertility preferences from a sociological perspective. In Egypt, studies by Pili (2021) and Ambrosetti et al. (2021) focused on the effects of cultural, economic, and gender-related factors on fertility intentions. Despite the expansion of research on the social, economic, and cultural determinants of childbearing decisions, insufficient attention has been paid to the role of the educational system in this important social issue. Education, as one of the most influential instruments of cultural formation, can directly affect individuals' attitudes and behaviors toward childbearing (Kebede et al., 2021). Rindfuss & Brauner-Otto (2020) demonstrated that in societies providing sufficient support for working women, educated women exhibit a greater tendency toward childbearing. Education can reduce anxieties associated with childbearing by enhancing occupational and economic security, thereby facilitating decision-making in this domain. Goldstein (2022) also emphasized that school-based educational programs and media campaigns can moderate negative attitudes toward childbearing. Furthermore, Rezaee et al. (2022) demonstrated the effectiveness of telephone-based and virtual education in improving women's attitudes toward childbearing. Their findings indicate that the use of cost-effective educational approaches can contribute to the effective implementation of pronatalist policies. The same research team also reported the effectiveness of group counseling based on motivational interviewing in enhancing childbearing motivation among female students. Nevertheless, education has not always produced supportive effects on childbearing. Formal education systems, in particular, have not only failed to adequately support population policies but have, at times, even functioned in the opposite direction (Ibrahim et al., 2022).

In Iran, historical analyses of population policies indicate that such policies have consistently been influenced by economic, social, cultural, and media-related factors. Studies by Alidousti, Safarian, and Khajeh (2024), as well as Alidousti, Hariri, and Safarian (2023), revealed that variables such as employment status, parental education, and economic pressures play a key role in families' willingness or unwillingness to have children. Mirhosseini and Mojtahedi (2023), with an emphasis on women's demands, investigated the influence of cultural, economic, medical, and welfare-related dimensions.

Mirsandesi (2023) examined the role of religious educational institutions, such as Islamic seminaries, in cultural formation and demographic change in Iran. A substantial portion of previous studies has neglected the influential role of education as a tool for cultural transformation, while only a limited number of studies have addressed the role of education in shaping attitudes toward childbearing. For instance, Akbarian, Moghaddam, and Moradi (2021) confirmed the effectiveness of education based on the Theory of Planned Behavior in increasing fertility intentions among women with one child. Similarly, Ayazi et al. (2021) emphasized social participation, economic conditions, and marital satisfaction as influential factors. In Iran Researchers such as Erfani and Shojaei (2019), Moshfegh and Alborzi (2018), and Shafiei Sarvestani (2013) have also examined the challenges, deficiencies, and transformations in Iran's population policies and highlighted the need for structural revisions in policymaking. Most Iranian studies have focused on fertility intentions through the examination of social, economic, and cultural factors.

Despite extensive evidence regarding the influence of education on attitudes and behaviors related to childbearing, there remains a lack of comprehensive comparative research specifically analyzing secondary school curricula with a focus on fertility-related components. Most previous studies have either concentrated on informal education (such as media and skill-based training programs) or merely examined the impact of education on population-related attitudes.

The importance of addressing this issue extends beyond Iran's demographic challenges and is also significant at the global level. According to the United Nations Population Fund (UNICEF, 2022), more than 650 million girls worldwide have been married before the age of 18. Furthermore, in 2020, 19% of women aged 20–24 in 98 countries had married before reaching the age of 18 (Akçay, Yiğit, & Bay, 2024). These statistics demonstrate the urgent need for fertility-related education during secondary education.

In recent years, the concept of "fertility literacy" has emerged in the scientific literature. The World Health Organization (WHO) has also acknowledged the necessity of fertility education and has included the concept of "fertility awareness" in the latest edition of its international glossary. This organization emphasizes the importance of education beginning in childhood and adolescence (Martins et al., 2024).

Since curricula play a determining role in shaping the attitudes and values of future generations (Yapıcıoğlu, 2021), a careful examination of curricula can constitute an effective step toward population policymaking. Accordingly, the present study adopts a comparative approach to examine the curricula of Iran and Türkiye. Türkiye was selected as the comparative case due to its cultural, religious, and social similarities with Iran, as well as its experience with comparable

demographic challenges such as declining fertility rates and population aging (Jahanpeyma et al., 2022). The findings of this study may assist educational and population policymakers in designing effective curricula for the promotion of childbearing and provide practical strategies for enhancing students' awareness in this area. The primary objective of this study is to compare the secondary school curricula of Iran and Türkiye in relation to childbearing. The research questions are as follows:

- What are the similarities and differences between the philosophical foundations of the secondary school curricula of Iran and Türkiye with respect to childbearing?
- What are the similarities and differences between the objectives of the secondary school curricula of Iran and Türkiye with respect to childbearing?
- What are the similarities and differences between the content of the secondary school curricula of Iran and Türkiye with respect to childbearing?

2. Research Method

This study employed a qualitative comparative method to examine and analyze the data. The research was conducted based on Bereday's comparative model, which consists of four stages of description, interpretation, juxtaposition and comparison (Wojniak et al., 2015). Data were collected through documentary research, involving the examination of sources such as official documents, governmental reports, textbooks, scholarly articles, and other written materials.

Iran and Türkiye were selected according to the strategy of "most similar social systems with different educational outcomes" (Madanidar & Kakia, 2019), as both countries are facing similar demographic challenges, including declining fertility rates and population aging. The data were gathered through searches of the official websites of the Ministries of Education of both countries, as well as an analysis of Iranian secondary school textbooks in theoretical streams (Mathematics, Experimental Sciences, Humanities, and Islamic Studies). The reviewed subjects included Biology, Geography, Economics, Sociology, Social Studies, Family Management and Lifestyle, Health and Hygiene, Thinking and Lifestyle for Girls and Boys, *Ahkam* (Islamic rulings) for male and female students in the Islamic Studies stream, and Religion and Life.

In Türkiye, the reviewed subjects included Health and Traffic Culture, Introduction to Genetics, Basic Religious Knowledge, Social Sciences Studies, Family in Social Life, Geography, and Biology. In addition, part of the required data was collected through searches in academic databases and search engines, including Google Scholar, Noormags, and Springer. For data analysis, a researcher-developed curriculum content analysis form was designed based on educational

indicators related to childbearing. To ensure the validity of the analysis form, the opinions of five specialists from the University of Birjand in the fields of demography and educational sciences were obtained.

3. Findings

In the present study, the findings are reported based on Bereday's four-stage comparative approach, including description, interpretation, juxtaposition, and comparison.

A) Description

In the descriptive section, the elements of the secondary school curriculum (philosophy, objectives, and content) related to childbearing in Iran and Türkiye are presented separately.

Iran

Analysis of the data indicates that the Iranian secondary education system, with respect to population growth, is influenced by the following principles as the "intellectual and philosophical framework" of childbearing and childrearing: fostering a generation that is faithful, monotheistic, committed, and aware of its responsibilities and duties toward God, oneself, one's spouse, children, society, and nature (Sayyahizadeh Fard, 2024); nurturing knowledgeable individuals interested in awareness across various domains such as understanding life stages, health awareness, physical, mental, and sexual well-being, puberty, the regulation and fulfillment of sexual needs through marriage, pregnancy, and childbearing; educating modest and morally disciplined individuals through avoiding illegitimate relationships with the opposite sex, adherence to Islamic dress codes and behavior, and avoidance of masturbation; and cultivating individuals who embody Islamic ethics, vitality, and health in physical, psychological, and sexual dimensions, including reproductive health, puberty hygiene, and prevention of sexually transmitted diseases. In addition, emphasis is placed on law-abiding and disciplined behavior through adherence to Islamic-Iranian regulations concerning marriage and childbearing (Ministry of Education of Iran, 2018).

At the beginning of the eighth-grade Social Studies textbook, in the teacher's guide section, the authors explain that the philosophy of education in this subject is to cultivate faithful, responsible, capable, and informed individuals in both personal and social life, committed to moral, religious, and revolutionary values, interested in Iran and its cultural identity, and equipped with life skills (Ministry of Education of Iran, 2024j). In Chapter Nine of the twelfth-grade Health and Hygiene textbook, controlling sexual needs through marriage, marital and reproductive health for the continuation of progeny and religious fulfillment, understanding one's existence and the needs

associated with different stages of life such as puberty, and prioritizing collective interests over individual interests through marriage are presented as philosophical foundations and objectives of childbearing (Ministry of Education of Iran, 2024h, pp. 101–110).

Lesson 18 of the eleventh-grade *Religion and Life* textbook further emphasizes self-confidence and self-esteem in relation to family formation and responsibility-taking within the philosophy of childbearing. It also addresses belief in God's lordship throughout life, awareness of the consequences of lifestyle choices and barriers to marriage, understanding social relationships, observance of piety, and the development of critical thinking as objectives related to childbearing (Ministry of Education of Iran, 2024f, pp. 222–230). In the tenth-grade *Ahkam* textbook for male students in the Islamic Studies track, emphasis is placed on observing sexual and hygienic regulations, controlling sexual behavior through marriage, avoiding masturbation, and learning about ritual purification (*ghusl*) and the conditions of ritual impurity (*janabah*). These topics are regarded as foundational to childbearing and aligned with its objectives (Ministry of Education of Iran, 2024a, pp. 52–53). Analysis of the curriculum content at the secondary level further demonstrates that, in Iran, portions of the subjects Biology, Geography, Economics, Sociology, Social Studies, Family Management and Lifestyle, Health and Hygiene, Thinking and Lifestyle for Girls and Boys, *Ahkam* in the Islamic Studies track for girls and boys, and *Religion and Life* are devoted to teaching reproduction and childbearing-related issues.

The findings also reveal that Chapter Seven of the eleventh-grade Biology textbook addresses topics such as reproduction, fertilization, heredity and biodiversity, sexually transmitted diseases, the relationship between population, society, and ecosystems, human physiology, body structure, nutrition, health, fetal development, pregnancy, in vitro fertilization, the menstrual cycle, reproductive system protection, stages of life and fetal growth, factors affecting maternal and infant health, population ecology, age pyramids and growth curves, analysis of demographic changes in Iran and globally, biosafety, and bioethics (Brahouei Moghaddam, 2021; Ministry of Education of Iran, 2024g, pp. 108–110).

Similarly, Lesson Seven of Chapter Three in the tenth-grade Geography textbook (Ministry of Education of Iran, 2024e, pp. 66–76), Lesson Eight of the tenth-grade Economics textbook for Humanities students (Ministry of Education of Iran, 2024b, pp. 84–90), and Lesson Sixteen of the tenth-grade Sociology textbook for Humanities students (Ministry of Education of Iran, 2024d, pp. 135–143) address demographic issues such as population distribution, population growth, demographic increase, the negative consequences of population decline, aging and youthful populations, population policies, family and society, the philosophy of life and understanding life

stages, and moral development. The purpose of these lessons is to develop students' abilities to analyze and interpret social life (Mikaeili & Motamedi, 2016).

Lesson Five of the twelfth-grade *Family Management and Lifestyle* textbook (Ministry of Education of Iran, 2024i, pp. 135–187) includes topics such as the importance of family, social and communication skills, marital relationships, socialization, number of children, family structure and problems, stages of marriage, and health services. In addition, appropriate nutrition, mental, social, and individual health are covered in Lesson Nine of the twelfth-grade *Health and Hygiene* textbook (Ministry of Education of Iran, 2024h, pp. 101–110). Topics such as appropriate nutrition and its effects on physical and reproductive health, the use of menstrual hygiene products, physiology and anatomy of reproductive organs including the uterus and reproductive system, communication skills, modest dress and chastity, health preservation, and ethical issues are addressed in the seventh-grade *Thinking and Lifestyle* textbook for girls and boys (Ministry of Education of Iran, 2024c).

The tenth-grade *Ahkam* textbooks for girls and boys in the Islamic Studies stream (Ministry of Education of Iran, 2024a) discuss the limits of interaction between *mahram* and *non-mahram* individuals, dress and gaze regulations, menstruation and related rulings, women's ritual purifications, pregnancy and placenta, masturbation, ritual impurity, nutrition and hygiene, marriage, ethics, puberty, nocturnal emission, and ritual bathing. Furthermore, Lesson 18 of the eleventh-grade *Religion and Life* textbook explains marriage, its objectives, and consultation with family members to students (Ministry of Education of Iran, 2024f, pp. 222–230). Despite the considerable philosophical foundations, objectives, and curriculum content related to childbearing in Iran, research findings indicate that the country is expected to face a growing trend of population aging over the next two decades (Mirzaei, Darabi, & Babapour, 2017).

Türkiye

In Türkiye, the educational system operates under the supervision of the Ministry of National Education and consists of three major stages: primary education, secondary education, and higher education. Secondary education in Türkiye covers grades 9 through 12 and generally includes students aged 14 to 18 years. High schools are divided into two categories: general high schools, which prepare students for university entrance, and specialized high schools such as vocational and technical schools, which prepare students for specific occupations (Çelik, 2020).

The Turkish educational system seeks to cultivate individuals possessing knowledge, skills, and behaviors consistent with social values and competencies. The curriculum is grounded in

philosophical principles and includes a set of values-oriented foundations. The dominant philosophy of Turkish secondary school curricula emphasizes core values such as justice in shared life, friendship between spouses, honesty in relationships, self-discipline, patience, respect for oneself and others, love, responsibility, family formation, childbearing, patriotism, and prioritization of national interests over personal interests, while aiming to transmit these values to students (Ministry of National Education of Türkiye, 2024f, pp. 4–5).

Furthermore, the competencies embedded in the curriculum are designed to foster individuals with integrated knowledge, skills, and capabilities within the educational system. Türkiye also emphasizes the development of students' national and religious identities (Sahin & Kesik, 2019), while equipping them to face the challenges of a changing society through critical thinking and problem-solving skills. In addition, the curriculum promotes the education of ethical individuals eager to acquire knowledge and awareness in areas such as health, body anatomy, stages of growth, and childbearing, as well as skills related to effective communication and family management. These elements collectively reflect the philosophy, mission, and vision of the Turkish secondary curriculum in relation to childbearing (Ministry of National Education of Türkiye, 2023, pp. 1–5).

Analysis of the objectives related to childbearing in the Turkish secondary curriculum indicates an emphasis on fostering critical and creative thinking, teaching social skills, preparing students for future life and the labor market, familiarizing them with anatomy and body physiology, understanding religious rules and regulations related to marriage and childbearing, promoting healthy habits, preserving health, and understanding the stages of life (Ministry of National Education of Türkiye, 2024, p. 4). Additionally, one of the indirect but influential objectives related to childbearing, introduced through the 2005 educational reforms, was the teaching of Scientific Process Skills (SPS) in science education. The use of these skills helps individuals make more informed decisions regarding everyday life issues (Yapıcıoğlu, 2021). Since population decline and the importance of childbearing are among today's major socio-scientific issues, incorporating such educational objectives into secondary education can empower students in this area.

Analysis of curriculum content further reveals that subjects such as Biology, Geography, Social Science Studies, *Family in Social Life*, Health and Traffic Culture, Introduction to Genetics, and Basic Religious Knowledge constitute the childbearing-related curriculum content in Türkiye (Ministry of National Education of Türkiye, 2024). The competencies defined within the Turkish Qualifications Framework (TQF)—including communication in the mother tongue, communication in foreign languages, mathematical and scientific/technological competencies, digital literacy,

lifelong learning, social and civic competencies, initiative and entrepreneurship, and cultural awareness and expression (Ağlar, Arslan, & Şahbaz, 2024)—are also reflected in this curriculum content. Topics such as reproduction, fertilization, heredity and biodiversity, sexually transmitted diseases, the relationship between population, society, and ecosystems, human physiology, organ structure, nutrition, health, fetal development, pregnancy, in vitro fertilization, menstrual cycles, reproductive system protection, stages of life and fetal growth, factors affecting maternal and infant health, population ecology, age pyramids and growth curves, demographic changes in Türkiye and globally, biosafety, and bioethics are taught to adolescents and young adults in Biology courses (Yeşildağ, Akbulut, & Aldoğan, 2024; Ministry of National Education of Türkiye, 2024c, pp. 68–88).

Likewise, the subjects *Social Science Studies* and *Family in Social Life* address issues such as family and society, philosophy of life and understanding life stages, moral development, the importance of the family institution, social and communication skills, marital relationships, socialization, number of children, and family-related issues (Ministry of National Education of Türkiye, 2024g, pp. 7–13; Ministry of National Education of Türkiye, 2023d, pp. 14–20). In Geography courses, topics such as population distribution and change, factors influencing demographic changes, and population-related policies associated with childbearing are taught (Ministry of National Education of Türkiye, 2024e, pp. 28–32; *Millî Eğitim Bakanlığı*, 2024). Health services, proper nutrition, mental, social, and individual health are included in the *Health and Traffic Culture* course (Ministry of National Education of Türkiye, 2018h, pp. 15–19). Chromosomes and sex determination are covered in the textbook *Introduction to Genetics* (Ministry of National Education of Türkiye, 2023a, pp. 14–19). Furthermore, topics such as marriage, lawful and unlawful relationships, standards of living, mutual responsibilities of spouses, respect for parents, children’s rights, ethics, and justice are addressed in the *Basic Religious Knowledge* textbook (Ministry of National Education of Türkiye, 2024b, pp. 12–28).

B) Interpretation

This section addresses the historical trends of population growth in Iran and Türkiye over the past fifty years and their effects on social policymaking, including the educational system.

Iran

Demographic changes in Iran during the past five decades have been influenced by population policies as well as social, economic, and cultural transformations. Iran’s population increased from approximately 19 million in 1955 to nearly 84 million in 2020, representing more

than a fourfold increase over a 65-year period (Moradabadi & Irannejad, 2024). This growth was associated with several factors, including declining mortality rates due to improvements in healthcare conditions and access to medical services, as well as rising birth rates influenced by cultural and religious beliefs and governmental support for childbearing. During the 1970s and 1980s, Iran experienced rapid population growth, which intensified pressure on natural resources and increased unemployment (Statistical Center of Iran, 2016).

In response to the negative consequences of rapid population growth, including economic and social pressures, the Iranian government adopted population control policies during the 1990s. These policies included family planning programs that resulted in a decline in population growth rates (Taheri, Pezhan, & Mahmoudi, 2021). Consequently, concepts such as family planning were incorporated into the educational system, and the Family Planning and Population Law was enacted (Islamic Consultative Assembly, 1993).

The population growth rate in Iran in 2025 is estimated at 2.09% (PopulationStat, 2025). Projections indicate that if the fertility rate reaches 2.5 children per woman, Iran's population will reach 94.6 million by 2041. However, if fertility rates continue to decline, the population at that time will be approximately 4.5 million lower. Effective population policies could therefore add around 4.5 million people to the population over the next twenty years. In this regard, particular attention should be paid to demographic changes and their consequences, especially shifts in the age structure. The proportion of youth is expected to decline, while the elderly population will increase significantly, such that by the end of the projected period Iran will enter the stage of population aging (Torkashvand Moradabadi & Irannejad, 2024). This trend is also illustrated in United Nations projection charts (Figure 1).

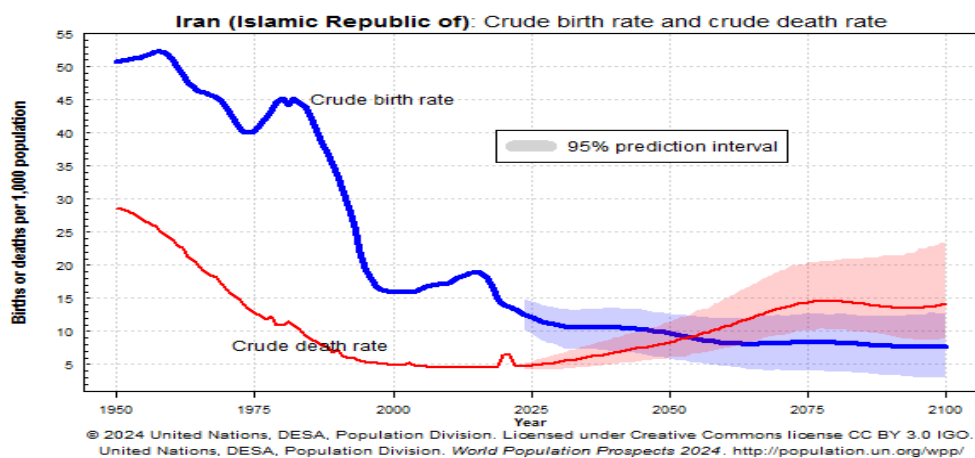


Figure 1. Crude Birth Rate and Crude Death Rate in Iran (1950–2100)

United Nations projections (2024) indicate that Iran's crude birth rate is expected to follow a declining trend within the 95% confidence interval. This decline is primarily influenced by family planning policies, socio-cultural changes, and economic challenges. Such a concerning trend highlights the necessity of integrated policies aimed at addressing population aging, strengthening the labor force, and improving institutional coordination in order to maintain demographic balance (United Nations, DESA, Population Division, 2024).

To address these demographic changes, it is necessary to implement incentive policies aimed at increasing fertility rates and reducing youth migration. In recent years, general population policies focusing on increasing fertility and rejuvenating the population structure have also been approved. However, the implementation of these policies has faced challenges such as changing beliefs and attitudes, economic and social difficulties, and lack of coordination among different institutions (Alidousti, Safarian, & Khajeh, 2024). Studies further demonstrate that population policies implemented after the 1979 Islamic Revolution in the fields of reproductive health and childbearing have not been sufficient to achieve a balanced and proportionate population structure (Mirzaei, Vaez, & Talebian, 2022).

Nevertheless, during the 2000s and 2010s, declining fertility rates and concerns regarding population aging led to a shift in the government's population policy approach. Through the provision of financial incentives and supportive measures, the government encouraged families to have more children (Mokhtari, 2021). In continuation of these policies, the *Family Protection and Youthful Population Law* enacted in 2021 emphasized the necessity of incorporating educational content related to general population and family policies into school curricula (Islamic Consultative Assembly, 2021).

Türkiye

Türkiye has also experienced significant demographic transformations over the past half century. Following the establishment of the Republic of Türkiye in 1923, population policies initially focused on increasing fertility rates in order to compensate for wartime losses and strengthen the country's economic capacity. However, beginning in the 1960s, with the implementation of five-year economic development plans, concerns regarding rapid population growth and its associated economic pressures led to the adoption of fertility reduction policies.

During the 2000s, Türkiye entered a new stage of demographic transition characterized by fertility rates approaching replacement level and increasing life expectancy. Since 2008, the Turkish

government has once again adopted pro-natalist policies aimed at counteracting population aging and the decline of the young labor force (Yucesahin, Adalı, & Türkyılmaz, 2016).

From 2008 onward, Türkiye's population increased from approximately 71 million to more than 85 million in 2022. Nevertheless, the population growth rate has declined significantly. In 2010, the growth rate was 15.88 per thousand, whereas by 2020 it had decreased to 5.5 per thousand, reflecting declining birth rates, increasing age at marriage, and changing family patterns. However, in 2022 the growth rate slightly increased to 7.1 per thousand, possibly due to migration, governmental support policies, or short-term demographic fluctuations. Overall, this trend indicates that Türkiye's population is moving toward slower growth and a higher average age (Akova, 2023).

Türkiye's population reached 85,664,944 in 2025 (Turkish Statistical Institute [TÜİK], 2025), while the population growth rate was reported to be 1.49% (PopulationStat, 2025). However, United Nations projections (2024) regarding the declining trend of the crude birth rate (within the 95% prediction interval) and the relative stability of the mortality rate in Türkiye from 1950 to 2100 indicate the challenge of population aging and the necessity of adaptive policymaking

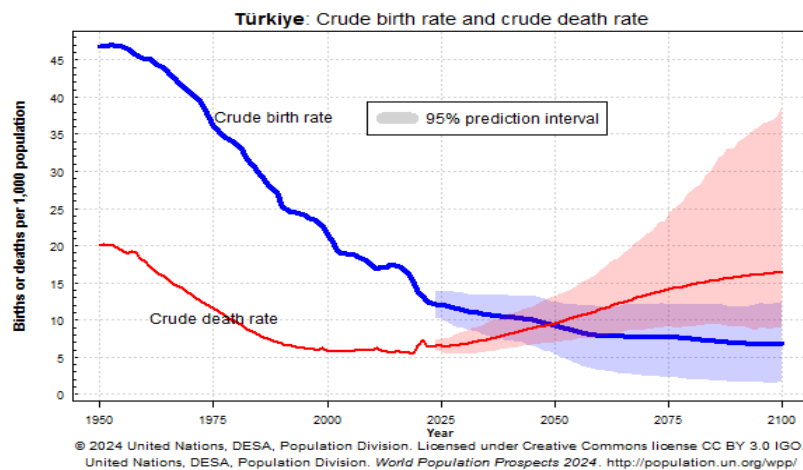


Figure 2. Crude Birth Rate and Crude Death Rate in Türkiye (1950–2100)
Source: United Nations, DESA, Population Division, 2024

In Türkiye, childbearing is regarded as an accepted component of social culture, and sex education programs for adolescents have been designed with the aim of supporting population growth. Nevertheless, research indicates that one of the major obstacles to the broader implementation of such programs is the persistence of negative attitudes toward sexual health education and the existence of hidden cultural resistance within Turkish society (Aslan, 2022). Given the country's substantial young population, the need for expanding school-based sexual

health education programs and enriching educational content has become increasingly evident. Türkiye is currently pursuing an active population policy accompanied by extensive governmental programs designed to encourage higher fertility rates and increase childbirth. One aspect of this policy orientation has focused on restricting access to abortion services, despite the fact that abortion remains legally permitted up to the tenth week of pregnancy (O'Neil, Ramaswamy, & Altuntaş, 2024).

In addition to the indirect references to childbearing-related issues in secondary school textbooks, the Turkish Ministry of Education has also provided direct public educational programs on family planning. For instance, Güney, Karakaş, and Doğan (2025) referred to educational materials developed for illiterate women regarding pregnancy and childbearing, which were found to improve young women's knowledge and attitudes. Likewise, Bağlan and Esencan (2025) emphasized the necessity of increasing men's knowledge of family planning and improving their understanding of family planning methods and joint decision-making with spouses. Overall, the factors influencing demographic changes in Türkiye include economic development (Organisation for Economic Co-operation and Development [OECD], 2018), women's educational attainment and knowledge, delayed age of marriage and declining number of children (United Nations, 2020), migration, governmental policies, family planning programs, and pro-natalist incentives (Turkish Statistical Institute, 2023).

C) Juxtaposition

Based on the findings derived from the descriptive and interpretive sections, the major components of childbearing-related curricula in the secondary education systems of Iran and Türkiye are examined through a juxtaposition approach.

Table 1. Juxtaposition of the Secondary School Curricula of Iran and Türkiye with Respect to Childbearing

Component / Country	Iran	Türkiye
Philosophy	Creating the foundations for educating a faithful and religious generation	Health promotion and the preservation of well-being and vitality
	Health promotion and the preservation of well-being and vitality	Moral development and commitment to duties and responsibilities toward others
	Moral development and commitment to duties and responsibilities toward others	Knowledge-seeking and interest in understanding the stages of life
	Knowledge-seeking and interest in understanding the stages of life	Self-confidence and self-esteem regarding family formation and pregnancy

	Self-confidence and self-esteem regarding family formation and pregnancy	Regulation of sexual needs through marriage
	Regulation of sexual needs through marriage	Friendship with one's spouse and honesty in relationships
Objectives	Belief in the lordship of God and His presence throughout all stages of life	Understanding one's existence, diverse needs, and capacities
	Belief in the divine identity of human beings, human dignity, and human capabilities	Awareness of the consequences of lifestyle choices (e.g., remaining single, preventing pregnancy, improper satisfaction of needs)
	Understanding one's existence, diverse needs, and capacities	Knowledge of social relationships, individuals' roles, rights, duties, and their importance
	Awareness of the consequences of lifestyle choices (e.g., remaining single, contraception, improper satisfaction of needs)	Prioritizing national and collective interests over individual interests (childbearing and population growth over irresponsibility, lack of commitment, and fear)
	Knowledge of social relationships, individuals' roles, rights, duties, and their significance	Observance of regulations related to sexual health, marriage, childbearing, puberty, and fertility
	Using one's inherent capacities to achieve a balanced and integrated identity in the path of growth and excellence	Development of critical and creative thinking
	Observance of piety (<i>taqwa</i>)	
	Prioritizing national and collective interests over individual interests (childbearing and population growth over irresponsibility, lack of commitment, and fear)	
	Observance of regulations related to sexual health, marriage, childbearing, puberty, and fertility	
	Practicing religious teachings, performing religious obligations, and avoiding prohibitions	
Content	<p>Biology: reproduction, fertilization, heredity and biodiversity, sexually transmitted diseases, the relationship between population, society, and ecosystem, human physiology, organ structure, nutrition, health, fetal growth, pregnancy, in vitro fertilization, menstrual cycle, reproductive system protection, stages of life and fetal development, factors affecting maternal and infant health, population ecology, age pyramids and growth curves, demographic changes in Iran and the world, biosafety, and bioethics</p>	<p>Biology: reproduction, heredity and biodiversity, sexually transmitted diseases, the relationship between population, society, and ecosystem, human physiology, structure and functioning of male and female reproductive systems, nutrition, health, fetal development (fertilization, cleavage, gastrulation, organogenesis), pregnancy, in vitro fertilization, menstrual cycle, reproductive system protection, factors affecting maternal and infant health, growth and development, biosafety, and genetics (consanguineous marriage and childbearing, cell culture, genetic counseling during pregnancy, blood groups and their effects on pregnancy and diseases)</p>

Geography: population distribution, population growth, and emphasis on the importance of youth population in the country	Geography: demographic changes, demographic transition processes and interpretation of population pyramids, population distribution, relationship between birth and death rates, and population and economy
Social Studies: family and society, philosophy of life and understanding its stages, moral development	Social Science Studies: rights and responsibilities in social life, population and social cohesion within family, classroom, and school environments, philosophy of life and understanding its stages, and moral development
Sociology: aging and youthful populations, population decline and its disadvantages, population policy	Family in Social Life: importance of family, social and communication skills, marital relationships, socialization, number of children, and family structure and problems
Islamic Studies (Ahkam) for girls and boys: rules regarding interactions between <i>mahram</i> and <i>non-mahram</i> , dress and gaze regulations, menstruation and related rulings, women's ritual purifications, placenta and pregnancy, masturbation, ritual impurity, nutrition and hygiene, marriage, ethics, puberty, nocturnal emission, ritual bathing, and dress codes	Basic Religious Knowledge: privacy protection, piety and modesty, healthy living, family formation for peace and lawful marriage, standards of living, mutual responsibilities of spouses, respect for parents, children's rights, ethics and justice, and ritual purification rules
Religion and Life: marriage and its objectives, consultation with family	Religious Culture and Ethical Knowledge: religion and valuing family, hijab and modesty, ethics in family relationships, responsibility, lawful nutrition and its influence on family life
Health and Hygiene: health services, proper nutrition, mental, social, and individual health	Health and Traffic Culture: health services, proper nutrition, mental, social, and individual health
Economics: population growth and the negative consequences of population decline	Introduction to Genetics: chromosomes and determination of a child's sex
Family Management and Lifestyle: importance of family, social and communication skills, marital relationships, socialization, number of children, family structure and problems, and stages of marriage	-
Thinking and Lifestyle for Girls and Boys: proper nutrition and its effects on physical and sexual health, use of menstrual hygiene products, physiology and anatomy of reproductive organs such as the uterus and reproductive system, communication skills, dress and modesty, health preservation, and ethical issues	-

D) Comparison

At this stage, the information presented in the juxtaposition section was organized and classified for comparative analysis in order to establish a structured framework for identifying

similarities and differences. Accordingly, the data related to the philosophy, objectives, and content of the secondary school curricula in Iran and Türkiye with respect to childbearing promotion were identified, categorized, and compared.

Table 2. Similarities and Differences between the Secondary School Curricula of Iran and Türkiye with Respect to Childbearing Promotion

Curriculum Elements	Component / Country	Iran	Türkiye
Philosophy	Creating the foundation for educating a faithful and religious generation	*	–
	Promoting health, well-being, and vitality	*	*
	Moral development and commitment to duties and responsibilities toward others	*	*
	Knowledge-seeking and interest in understanding the stages of life	*	*
	Self-confidence and self-esteem regarding family formation and pregnancy	*	*
	Regulation of sexual needs through marriage	*	*
Objectives	Belief in the lordship of God and His presence throughout all stages of life	*	–
	Belief in the divine identity of human beings, human dignity, and human capabilities	*	–
	Understanding one's existence, various needs, and capacities	*	*
	Awareness of the consequences of lifestyle choices (remaining single, contraception, inappropriate satisfaction of needs)	*	*
	Knowledge of social relationships, individuals' roles, rights, duties, and their significance	*	*
	Utilizing one's inherent capacities to achieve a balanced and integrated identity in the path of growth and self-actualization	*	–
	Observance of piety (<i>taqwa</i>)	*	–
	Prioritizing national and collective interests over individual interests (childbearing and population growth over irresponsibility, lack of commitment, and fear)	*	*
	Observance of regulations related to sexual health, marriage, childbearing, puberty, and fertility	*	*
	Adherence to religious teachings, fulfillment of religious obligations, and avoidance of prohibitions	*	–
	Development of critical and creative thinking	–	*
Content	Reproduction, fertilization, heredity and biodiversity, in vitro fertilization, chromosomes, and sex determination	*	*
	Sexually transmitted diseases, human physiology, organ structure, protection of the reproductive system, nutrition, and health	*	*
	Fetal development, pregnancy, menstrual cycle, stages of life and fetal growth, and factors affecting maternal and infant health	*	*
	Relationship between population, society, and ecosystem; population ecology; age pyramids and growth curves; demographic changes at national and global levels; young and aging populations; population decline and its disadvantages; and population policy	*	*

Biosafety and bioethics, standards of living, mutual responsibilities of spouses, respect for parents, children's rights, ethics, and justice	*	*
Family and society, importance of family, social and communication skills, marital relationships, socialization, number of children, family structure and problems, and gender roles	*	*
Dress codes and modesty, regulations regarding interactions between <i>mahram</i> and <i>non-mahram</i> , dress and gaze regulations, and masturbation	*	–
Menstruation (<i>istihada</i> and <i>hayd</i>) and related rulings, women's ritual purification practices, nocturnal emission, and ritual bathing (<i>ghusl janabah</i>) and its regulations	*	–

The comparison and analysis of the secondary school curricula of Iran and Türkiye with respect to the promotion of childbearing indicate that the curricula of the two countries exhibit both similarities and differences. In terms of the philosophy and objectives related to childbearing, the two educational systems share similarities in five components respectively, while similarities in curriculum content are observed across six components. Furthermore, differences exist in one philosophical component, six objective-related components, and two content-related components. Overall, Table 2, which presents the similarities and differences between the secondary school curricula of Iran and Türkiye regarding childbearing promotion, contains 25 subcomponents. Among these, 9 components demonstrate differences, whereas 16 components reveal similarities between the two countries. The major similarities and differences between the curricula of the two countries are summarized below.

Similarities

From a philosophical perspective, Islam has significantly influenced the educational philosophy of both countries. Interest in knowledge and awareness, patriotism, adherence to ethical principles, commitment to values, preparedness for a meaningful life, and acceptance of responsibility are evident in the philosophy of secondary education curricula in both Iran and Türkiye. The dominance of Islamic principles in the philosophy, values, beliefs, mission, and vision related to childbearing has led to convergence in the ethical and religious principles emphasized in relation to childbearing, which are reflected in the curriculum objectives of both countries. In terms of curriculum content, both countries address childbearing-related topics in subjects such as biology, geography, and health education. In Iran, these issues are mainly discussed in health education and social studies courses, whereas in Türkiye, in addition to these subjects, topics related to childbearing are also incorporated into courses such as traffic culture and family

management. Health education in disaster and crisis situations appears to receive greater emphasis in Iran.

Differences

From the perspective of curriculum philosophy, the Turkish curriculum places greater emphasis on critical thinking and problem-solving skills, whereas the Iranian curriculum emphasizes the upbringing of a faithful, monotheistic, and revolutionary generation. In addition, the prevailing cultural norms and traditions embedded within the curricula differ between the two countries. In Iran, religious themes are extensively integrated throughout the curriculum objectives, while in Türkiye such themes are generally framed as a broader overarching objective. With regard to curriculum content, certain childbearing-related topics are not addressed within the same school subjects in the two countries. For example, economics and sociology courses in Iran explicitly address childbearing-related issues, while in Türkiye the subject is more specifically discussed within the course *Introduction to Genetics*.

4. Conclusion

The primary aim of the present study was to compare the secondary school curricula of Iran and Turkey with regard to the promotion of childbearing. The findings derived from document analysis indicated that the educational systems of the two countries share several significant similarities while also differing in certain structural and content-related dimensions. One of the most notable similarities concerns the influence of Islamic teachings on shaping the educational philosophy, values, and objectives associated with the promotion of childbearing. This religious orientation has contributed to a degree of alignment in the ethical and social principles related to fertility and family formation in both countries. Nevertheless, the manner in which these components are integrated into the curriculum differs considerably. In Iran, religious teachings are extensively embedded within curricular objectives and educational content, whereas in Turkey they are addressed more as a general educational orientation. This difference in the integration of religious teachings has also been emphasized in the study by Aghaei and Badreh (2023). It should be noted that the increasing emphasis on religion in the Turkish educational system has largely occurred under the policies of the Justice and Development Party (AKP); prior to this shift, Turkey's educational system was primarily grounded in secular nationalism, which differed substantially from the value framework governing formal education in Iran (Yilmaz, 2022). Religion, as a form of governance and discursive framework in social policymaking—including fertility policies—plays an influential role, and several studies (Kavas & Thornton, 2020; Saluk, 2023) have highlighted the

significance of religion in fertility policies within Muslim societies, demonstrating that religious women tend to exhibit greater inclination toward childbearing (Nguyen et al., 2024). Accordingly, a religiously informed curriculum may provide a suitable context for promoting childbearing.

In terms of health literacy, which constitutes one of the key components of informed decision-making regarding childbearing, both countries have addressed this issue to some extent. In Iran, health literacy concepts are incorporated into subjects such as *Health and Hygiene* and *Lifestyle Education*, while in Turkey similar issues are discussed in courses such as *Health and Traffic Culture* (Bektas et al., 2021). However, studies indicate that adolescents' health literacy levels in Iran remain limited (Saeidi Golucheh et al., 2017), suggesting the need for curricular revision in secondary education. Likewise, research conducted in Turkey has shown that more than half of adolescents and young adults possess low or moderate levels of health literacy, highlighting the necessity of educational interventions in this area (Sarhan, Fujiya, Kiriya, et al., 2023).

Another important finding concerns the greater emphasis placed by the Turkish educational system on critical thinking and problem-solving skills, particularly in relation to family and childbearing issues. Nevertheless, even in Turkey, the level of attention devoted to these skills in school textbooks has been found to be insufficient (Kuru & Şimşek, 2022). Therefore, it appears necessary for the Iranian curriculum to place greater emphasis on the cultivation of critical thinking skills, as such competencies can foster active and analytical student engagement with major social issues such as population policies (Shabani, 2012).

Differences were also observed in relation to indirect educational objectives influencing childbearing. One of the major reforms introduced into the Turkish educational system in 2005 was the emphasis on Scientific Process Skills (SPS) in science education. The application of these skills enables individuals to make more informed decisions when confronted with socio-scientific issues—namely issues that create uncertainty in everyday life and for which even scientific consensus may not exist (Yapıcıoğlu, 2021). Since population decline and childbearing may be regarded as socio-scientific issues, incorporating such educational objectives into secondary education may empower students to engage more effectively with these matters. Marx, Prasad, and Stout (2023) also emphasized the importance of curricular content in raising awareness regarding the significance of childbearing. From a content perspective, both countries address childbearing-related issues through subjects such as biology, geography, health education, and social studies. In Iran, reproductive health topics are mainly integrated into health and social studies courses, whereas in Turkey such topics are additionally addressed through courses such as *Traffic Culture*

and *Family Management*. Furthermore, subjects such as sociology and economics in Iran, and introductory genetics in Turkey, address childbearing-related issues more explicitly and directly.

Regarding sexual health education, previous studies suggest that this field still suffers from substantial shortcomings in Turkey, particularly because information related to puberty and sexual development is not systematically provided in schools (Yazıcı, Dolgun, & Öztürk, 2011). Educational interventions, however, can play a significant role in reducing misconceptions and sexual taboos (Ünal Toprak & Turan, 2021). Similar deficiencies are also evident in Iran, especially in areas related to sex education, gender differences, risky behaviors, and protection against harm (Afshari, Sarmadi, & Nateghi, 2022). It appears that the intended goals of health and lifestyle education courses have not yet been fully achieved. Consequently, teachers' experiences may help identify the underlying causes of students' limited awareness in these domains. In addition, parental education concerning adolescents' sexual education may serve as an effective complementary strategy (Kayabaşı & Sarı, 2024).

Another issue associated with childbearing that appears in Turkish secondary school history and social studies textbooks is the representation of motherhood through gender roles. In this regard, Pamuk and Muç (2021) examined women's gender roles in Turkish history textbooks during the 2019–2020 academic year. Their findings indicated that women were predominantly associated with traditional roles such as motherhood and childrearing (Pamuk & Muç, 2021), and were represented in primary and secondary social studies textbooks mainly as primary caregivers for children (Akay Şahin & Açıkalin, 2021). Similar patterns have also been identified in Iranian secondary school textbooks (Mahdiyar, Akbari, & Shakeri, 2023). In both Iran and Turkey, school textbooks tend to portray childbearing as one of women's most important and valuable responsibilities, although researchers have criticized such representations as reinforcing traditional and stereotypical gender roles (Mahdiyar, Akbari, & Shakeri, 2023). On the other hand, integrating disaster-health education into school curricula may influence women's attitudes toward childbearing (Cirban Ekrem, Örenlioğlu, & Davulcu, 2024). Although this issue is addressed to some extent in Turkish geography textbooks (Millî Eğitim Bakanlığı, 2024), studies suggest that the coverage remains insufficiently comprehensive (İncirkuş, 2023). By contrast, the Iranian curriculum addresses disaster-related education across a wide range of subjects from primary through secondary education, including topics such as natural hazards, first aid, global warming, and post-crisis interventions (Gokmenoglu, Yavuz, & Sensin, 2023).

The findings of this study may serve as an operational framework for curriculum planners, educational experts, and policymakers seeking to revise secondary school curricula in order to

institutionalize the components of responsible childbearing. It is therefore recommended that educational policymakers and curriculum planners in Iran strengthen the role of the educational system in advancing population policies and promoting childbearing through curriculum revision and the integration of population-oriented concepts. Such measures may include incorporating critical thinking topics into religious and sociology courses regarding the consequences of delayed marriage and declining fertility rates; strengthening socio-economic discussions related to population issues in sociology and economics courses; expanding reproductive health education in lifestyle and health courses; enhancing religious education related to parental responsibilities and childbearing; and improving communication and family-life skills within life-skills and lifestyle education courses. These reforms may help provide the cultural, educational, and psychological foundations necessary for encouraging younger generations toward family formation and responsible childbearing.

Similarly, it is suggested that the Turkish educational system strengthen religious and social education concerning childbearing from an Islamic perspective, promote indirect sexual education through culturally acceptable tools such as animations, and expand curriculum content related to disaster health in order to enhance students' resilience in this area. An important consideration in this regard is the impact of cultural differences between the two countries. Iran's predominantly collectivist social structure and Turkey's comparatively individualistic orientation directly influence attitudes toward childbearing (Havighurst et al., 2022). These differences suggest that curriculum development and reform in each country should be designed in accordance with its own specific cultural context.

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