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# What Causes Foreign Language Speaking Anxiety?

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*“The limits of my language mean the limits of my world.” –Ludwig Wittgenstein*

AS a result of the development of humanistic psychology in the 1960s, there has been a growing recognition that affective factors can significantly impact the outcomes of education (Lu, 2001). Affective factors in language learning, particularly in second language acquisition, have been reckoned as non-cognitive factors and along with cognitive factors, have sparked substantial attention among academics. Affective variables that may influence foreign language acquisition include a variety of emotions and feelings arising in foreign language classroom such as anxiety, fear, embarrassment, or sense of inferiority. Among them, second language anxiety has long been a popular topic in foreign language instruction research.

According to Gardner & MacIntyre (1993), anxiety in language acquisition refers to the apprehension experienced by the individual in the language class or any situation in which the language is used. Horwitz et al. (1986) emphasized that foreign language anxiety was a unique phenomenon in language learning and defined it as complex emotional experience involving self-perception, beliefs, feelings, and behaviors. They also drew parallels between it and three relevant performance anxieties: communication anxiety, test anxiety, and fear of negative evaluation.

Research has shown that anxiety has multifaceted effects on foreign language learning. It is often associated with negative emotional experiences such as uneasiness, lack of confidence, self-negation, worry, and tension (Horwitz et al., 1986). Symptoms of foreign language anxiety typically include sweaty palms, increased heartbeat, unusual voice, and skewed intonation, appearing lost when called to answer questions, forgetting learned words or phrases, and refusing communication (Young, 1991). Many studies revealed a significant negative correlation between anxiety and foreign language achievement and proficiency (Aida, 1994; Horwitz & Young, 1991).

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*Foreign Language Speaking Anxiety and Its Link to Speaking Self-efficacy, Fear of Negative Evaluation, Self-perceived Proficiency and Gender* in this issue of the journal focused on examining factors contributing to speaking anxiety in the EFL classroom. The study identified the correlations between EFL speaking anxiety and student speaking self-efficacy, fear of negative evaluation, and self-perceived speaking proficiency. It also demonstrated how these variables predicted EFL speaking anxiety. In addition, the research confirmed that there were gender differences in EFL speaking anxiety (Okyar, 2023). The findings of this study have significant pedagogical implications for second/foreign language instruction.

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# Life Education: Reshaping Education for the Sake of Life

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*“Give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime.” –Maimonides*

LIFE is the starting point as well as the primary aim of all educative activities. The essence of education is to create conditions to support the development of individual life, as Montessori (2004) famously said that the purpose of education is to foster the healthy development of force of life in children, and that education is everything that has the potential to boost their vitality. Successful education allows students to grow in an autonomy-supportive environment and learn to appreciate, respect, and treasure life while acquiring academic knowledge. This is the fundamental responsibility of education (Lansdown, 2005). Pointless are the seemingly great accomplishments of the individual who has no idea of meaning in life; likewise, any education that fails to assure the healthy development of individual life is ineffective, no matter how advanced it appears.

Currently, a plurality of nations and regions are witnessing the constant emergence of life-harming issues due to the lack of life education. The unreasonably high penetration of information technology and radical social transformation have catalyzed the proliferation of life-related problems, such as suicide, homicide, violence, drug abuse, obesity, nihilism, and mental disorders, which are exhibiting a growing trend in younger age groups. According to the UNICEF report entitled *The State of the World’s Children 2021*, suicide ranks as the fifth leading cause of mortality among adolescents aged 10–19; Annually, approximately 46,000 youths aged 10 to 19 kill themselves (UNICEF, 2012). China’s *Health Statistical Yearbook (2020)* revealed that the suicide incidence among teens had been steadily increasing in recent years, and it was the second leading cause of death in this age group (after traffic accidents). In the United States, results from a national survey showed the percentage of teenagers aged 12–17 years who experienced a past year major depressive episode rose from 9% in 2004 to 15.7% in 2019; Centers for Disease Control and Prevention (CDC) reported that suicide rates among adolescents aged 10–14 years increased 100% between 2010 and 2019 (Ruch & Bridge, 2022).

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In response to these issues, many countries have worked to popularize life education over the past few decades. Life education in America emerged as a countermeasure to life-threatening behaviors such as drug abuse, suicide, homicide, and sexual promiscuity, and has now been interwoven into school and family education. In 1986, the New York City's commission of education approved an innovative curriculum program for family life education, which included sex education, in an effort to help teenagers and young children overcome anxiety and develop a positive attitude towards their bodies. It was mandated that this program should run from kindergarten to high school (Schechter, 1986). As to the UK, its life education began as a reaction to drug abuse among teenagers. The UK Life Education Research Center was established in 1986, aiming to develop among people, especially teenagers and children, a better understanding of the value and significance of life and to reduce the incidence of drug abuse, violent behaviors, AIDS and other social problems. Life education in the UK has formed a coordinated framework engaging the government, community, school, and family and emphasizes youth's pursuit of meaning in life, which has proved significantly productive (Formby, 2011). In 1989, the revised basic education curriculum of Japan stipulated the spiritual pursuit and reverence for life as the pivotal goals of moral education. It also advocated the implementation of "Extra Education" program to educate young people to appreciate and value life and be more resilient when encountering setbacks and failures (Fang, 1990).

Chinese educational researchers began to pay attention to life education in the 1990s. Academics such as Ye (2015) and Feng (2003) endeavored to spread the foreign research on life education in the Chinese educational community and progressively develop life education theories and practical methodologies based on domestic conditions. Subsequently, more research has been conducted in response to practical issues or pressing crises and has won nationwide recognition, contributing to the increasing popularity of life education in China.

This issue of the journal published two articles addressing life education in China. *The Necessity of Including Life Education in Chinese Basic Education Curricula* gave an overview of existing life education research in China and emphasized the significance of life education among Chinese adolescents in the context of prevalence of life-related issues (Li, 2023). *Life Education for College Students: A Case Study of Life Education in Chinese Universities* described problems with current college life education in China such as immature life education curricula, inadequate life-education subject matter, and absence of life purpose among college students, pinpointed the underlying causes, and made pertinent suggestions for improving life education in higher education institutions (Suo & Zhou, 2023).

Due to the relatively late start of life education in China, there is a lack of impactful theories, publications, and journals in this regard. More insightful research on the curricular design and instructional practice of life education is necessitated. In publishing the two studies, we aim to promote widespread debate on the implementation of life education.

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# The Sustainability Literacy of Students: A Comparative Study between Turkey and the UK

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**Abstract:** *In recent years, the sustainability literacy has become crucial for building more sustainable future. In this regard, a shift toward sustainability requires literate society on sustainability issues at global scale. Thus, the current study aims to detect the status of sustainability literacy of British and Turkish students. The study was conducted as a survey research with university students in the UK and Turkey within the context of a project that was supported by TUBITAK (Turkish Scientific and Technological Research Organization) and entitled “Ecological literacy education”. The participants (n: 1023) of the study are students attending several departments of Plymouth University in the UK and Mugla Sitki Kocman University in Turkey. The data were collected by using the Scala of Sustainability Literacy and analyzed using appropriate statistical tests at SPSS 22. The findings show that the participants’ sustainability literacy varies significantly depending on their sustainability attitude (SA), sustainability behavior (SB), sustainability knowledge (SK). Besides, the results of t- test analysis indicate that the participants exhibit different tendencies depending on the variables nationality, gender and place. On the other hand, the results of One-way ANOVA-Test revealed that the participants’ sustainability literacy varies depending on the department attended.*

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**Keywords:** *Sustainability, Sustainability Literacy, Sustainability Education, Environmental Education*

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## Introduction

THE transition toward sustainability requires effective sustainability education especially. However, sustainability as a subject has been thought of in terms of environmental education. Also, various tools of environmental literacy rather than sustainability literacy were used to assess learning outcomes. On the other hand, the research on sustainability literacy is limited locally. Therefore, there is a need to investigate the status of sustainability literacy of people using a sustainability literacy scale within a comparative study between different nations. Thus, the current study aimed to detect the sustainability literacy of British and Turkish university students.

### *The Education for Sustainability and Sustainability Literacy*

Sustainability as a future vision refers to a cross-disciplinary transformation of whole human life in which everyone is environmentally, economically and socially interconnected with each other (Sterling, 2004, p.6). In this regard, sustainable development goals (SDGs) declared by UN as future vision focus on mental shifting for achieving more sustainable world (UNESCO, 2017). There is no doubt that achieving the sustainable development goals (SDGs) requires that each person should be sustainability literate.

The basic framework of environmental literacy was stated by Roth (1992, p.17). According to him, environmentally literate citizens are able to recognize environmental problems, to evaluate environmental issues before acting, to take action for solving environmental problems and to take care of needs of future generations. Orr (1992: 92) describes environmental literacy as follows: “*Environmental literacy, further, implies a broad understanding of how people and societies relate to each other and to natural systems, and how they might do so sustainability*”. On the other hand, Capra (2003, p.201) defines ecological literacy as our ability to understand the basic principles of ecosphere and to live accordingly.

The attributes framing environmental literacy are associated with four main components defined as knowledge, sensitivity, action and active involvement (Marcinkowski, 1991; Volk & Mc. Beth, 1997; Simsons, 2001). In this regard, Hollweg et al. (2011) conceptualized the components of environmental literacy as knowledge (e.g. knowledge of physical and ecological systems; knowledge of social, cultural, and political systems), dispositions (e.g. sensitivity, locus of control/self-efficacy), competencies (e.g. can identify and analyse environmental issues) and environmentally responsible behaviour.

Moreover, the scope and meaning of environmental literacy was extended to sustainability literacy due to transition from environmental education to sustainability education recently (Sterling, 2004, p.50; Brando et al., 2022). In this connection, sustainability literacy has become a major outcome of sustainability education (Sandri, 2014). *Seen from this perspective, sustainability literacy also implies the ability for a sustainable future rather than environmental literacy.* In this sense, sustainability literacy was defined as a competency for transition toward sustainability (Winter & Cotton, 2012). Stibbe and Launa (2014, p.11) describe sustainability literacy as a collection of skills that can contribute to transition toward more sustainable society. Also, according to Parkin et al. (2004, p.9), sustainability literacy addresses as an “umbrella term” to understand the symbiotic relations among environmental, social and economic dimensions of sustainable development. Also, a sustainability literate person is able to combine appropriate knowledge with skills and furthermore recognize and appreciate sustainable actions of others.

## ***Literature Review***

Today, in line with the sustainable future vision, for environmental education to be extended towards sustainability education, environmental literacy should be updated as sustainability literacy (Sterling, 2012). Thus, in the current study, the literature on environmental literacy is presented as sustainability literacy

## **The Status of Environmental (Sustainability) Literacy**

When the literature is reviewed, it is seen that the environmental literacy (sustainability literacy) of different participants varies depending on their knowledge level, attitude and behaviour in general. Previous studies reported the results on various aspects regarding the level of participants' environmental (sustainability) literacy. High scores on knowledge were reported by Kaplowitz and Levine (2005), McBeth and Volk (2009), Erdoğan and Ok (2011), Al-Naqbi and Alshannag (2018), Sousa et al., (2021), low scores on knowledge were reported by Esa (2010), Veisi et al., (2019), high scores on attitude were reported by Erdogan and Ok (2011), He et al., (2011), Balcı (2012), Esa (2010), Veisi et al., (2019), Sousa et al., (2021), low scores on attitude and behavior were reported by McBeth and Volk (2009) and low scores on behavior were reported by Erdoğan and Ok (2011), and Esa (2010).

Participants' sustainability literacy may also vary across the sub-dimensions of this literacy. Indeed, Tekgoz et al. (2014) reported that while participants can easily answer questions about biodiversity and pollution, they have difficulty in answering questions about interrelationships in nature and atmospheric emission. In addition, the participants approve of the eco-

centric statements more than the anthropocentric ones. On the other hand, the tendency to use energy and paper sparingly in daily life is common (Ozdemir, 2019; Janmaimool and Khajohnmanee, 2019). In contrast, environmentally friendly ventilation (Sousa et al., 2021), recycling, individual sacrifice and active participation type sustainable practices (Ozdemir, 2019) are less exhibited.

## The Demographic Variables (Nation, Gender, Place, Department)

Many studies have been conducted to measure and monitor nations' awareness of and attitudes and behaviours towards the issues of environment and sustainability (Korfiatis et al., 2004; Shulz & Zelenny, 1999; Lin & Shi, 2006; Pisano & Lubell, 2017; Frank et al., 2020; Brando et al., 2022).

In this regard, Shulz and Zelenny (1999) and Nawrotzki (2012) indicated that the citizens of the less developed countries exhibited highest concern for the environmental issues. However, as Frey Meyer and Johnson (2010), Oreg and Katz-Gerro (2006), Pirani and Secondi (2011) showed that the people in developed countries appear to exhibit more positive behaviors than others. On the other hand, Liu and Sibley (2012) and Pisano and Lubell (2017) found that there is a stronger positive correlation between the environmental attitude and behavior in developed countries.

Numerous studies consider the role of gender on sustainability literacy. In this regard, a lower level of knowledge among females than males was reported by various studies such as the ones conducted by Al-Naqbi and Alshannag (2018), Choe et al. (2020), Sousa et al. (2021). However, Dogan and Purutcuoglu (2017) and Sousa et al. (2021) have stated that the knowledge of participants don't differ by gender. On the other hand, many studies reported higher attitude related to sustainability literacy among females than males such as the ones conducted by Cho (2007), Erdogan (2013), Ozturk and Tokgoz (2016), Cimen and Benzer (2019), Aytekin et al. (2021). Similarly, the female participants were found to be exhibiting more sustainable styles than males in daily life (Choe, 2007; Teksoz, Sahin & Ertapinar, 2010; Erdogan, 2013; Cotton et al., 2018).

The place where the participants spent the longest time in their childhood was also found to be a predictor of sustainability literacy. As Louv (2012, p.43) emphasised, the nature experiences during childhood could play main role to form human-nature relationship. He described the side effect of a childhood spent in isolation from nature as "nature -deficit disorder". Numerous researchers such as Wells and Lekies (2006), Strife and Downey (2009), Wells (2000), Chawla (2006), Ewert et al., (2005) reported the cru-

cial role of nature experiences in childhood in the development of adults' proenvironmental attitudes and behaviors.

In fact, the vision of sustainability is based on the conflict and reconciliation of different perspectives: ecological, economic and socio-cultural. That's why, the meaning and priority regarding to sustainability vary depending on the perspective adopted.

In this regard, a few descriptive studies focused on the effect of education programs on students' sustainability literacy. For instance, Cotton, Miller and Valle (2018) reported that the students from health-medicine seem to ready to accept ecological worldview more than the students from social sciences, while students from science-technology departments seem to behave more sustainably than the students from health and social sciences departments regarding energy literacy. On the other hand, the level of knowledge of the participants from science-technology departments appears to be higher than the participants from health and social sciences departments. However, Goulgouti et al. (2019) stated that the knowledge and attitude scores of science-technology students seem to be higher than humanity sciences students while behavior scores don't differ. Tiftikci (2014) noted that the awareness on renewable energy sources of students in education faculties is higher than others.

## ***Rationale, Purpose and Research Questions***

Several studies have been conducted for the assessment of the status of sustainability literacy of various participants globally. However, studies in this area are limited to local evaluations rather than international comparisons. However, the transition to sustainability depends on the comparative determination of the difficulties or orientations of different participating groups in establishing a sustainable future. On the other hand, the relevant literature is dominated by environmental education and environmental literacy terminology. For this reason, international studies with appropriate terminology and unity are needed for the integration of ecological, economic and socio-cultural perspectives of sustainability. Thus, the current study investigated the sustainability literacy of the UK and Turkish students in terms of sustainability knowledge, sustainability attitude and sustainability behavior dimensions, taking into account the variables of nationality, gender, the place where the longest time is spent during childhood and department.

Through assessing the sustainability literacy efficiency globally, the findings of the study could contribute to the monitoring and enhancement of sustainability education practices.

The following research questions were investigated in this study:

- *What is the level of participants' sustainability knowledge (SK), sustainability attitude (SA) and sustainability behavior (SB)?*

**Table 1. Participants' Demographic Features.**

		f	%
Nation	British	522	51.0
	Turkish	498	48.6
Gender	Female	665	64.8
	Male	351	34.2
Place	Urban	629	61.4
	Rural	392	38.3
Department	Health and Medicine	218	21.3
	Social Sciences	235	22.9
	Environmental Sciences	186	18.1
	Education	222	21.7
	Sciences	81	7.9
	Engineering and Computer	81	7.9
Total		1023	100

- *How do participants' SA, SB and SK scores vary depending on nationality, gender, the place where the longest time spent during childhood and department?*

## Method

The study was designed as a descriptive research to investigate and compare the sustainability literacy in Britain and Turkey.

## *Participants*

The participants are British and Turkish students (n: 1023) who were studying in different departments at University of Plymouth in the UK and Mugla Sitki Kocman University in Turkey. The demographic features of the participants are presented in **Table 1**.

## *Instrument*

The sustainability literacy scale developed in English as a part of TUBITAK project (Ozdemir, 2021) was used for data collection. The scale consists of four dimensions; "sustainable attitude (SA)", "sustainable behavior (SB)", "sustainable knowledge (SK)" and "sustainable perception (SK)". The study was conducted considering the first three dimensions in the scale; SA, SB and SK.

The part of the scale limited to the dimensions of SA and SB has a Cronbach's alpha reliability coefficient of 0.839. The validity of the dimensions of sustainability knowledge (SK) and sustainability perception (SP) were checked through taking the experts' recommendations into consideration. As a result, it was confirmed that the content of the items in the sub-dimensions of knowledge and perception concurs with the relevant literature.

## **Sustainability Attitude (SA)**

The dimension of sustainability attitude (SA) consists of a Likert-type scale items (n: 14) addressing the sub-dimensions that are entitled as "concern/worried", "social responsibility" and "locus of control". The items in the SA dimension assess the extent to which participants agree with the statements by using five possible response options (1 = strongly disagree, 2 = disagree, 3 = have no opinion, 4 = agree, 5 = strongly agree).

## **Sustainability Behavior (SB)**

The dimension of sustainability behavior (SB) includes Likert type items (n: 16) responded with one of the following response options (1= never, 2 = very seldom, 3 = sometimes, 4 = often, 5 = almost always). The SB was designed to have the sub-dimensions of "consumption pattern", "household use" and "participation".

## **Sustainability Knowledge (SK)**

The dimension of sustainability knowledge (SK) consists of multiple-choice and close-ended questions (n: 11), which address fundamental ecological processes and principles (SK1, SK2, SK3, SK4, SK5), natural sources-human use (SK6, SK7, SK8) and environmental problems/issues (SK9, SK10). A correct response for each item is scored as "1" and an incorrect response is scored as "0".

## ***Analyses***

The data obtained in this study were analysed with descriptive analysis techniques in SPSS program. First of all, it was tested whether the normal distribution assumption was met using the Shapiro-Wilk test and it was found that the normal distribution assumption was met (Skewness: 0.077). The sustainability literacy status of the participants was presented descriptively, taking into account the mean score, the scores taken from the dimensions of the scale and the scores taken from each item. Then, the status of the participants'

**Table 2. Mean and Standard Deviation of the related Dimension of Participants' Sustainability Literacy.**

Dimension	N	X	Range (Min-Max.)	SD
Sustainability Attitude (SA)	1,020	35.46/3.54	19-50	6.98
Concern/worried (1-4)	1,020	13.47/3.36	4-20	4.00
Social responsibility (5-7)	1,020	11.88/3.96	4-15	1.98
Locus of control (8-10)	1,020	10.90/3.63	3-15	3.18
Sustainability Behaviour (SB)	1,020	48.12/3.43	23-70	8.90
Consumption Pattern (1-5)	1,020	18.05/3.61	5-25	3.77
Household Use (6-8)	1,020	13.01/4.33	3-15	1.99
Participation (9-14)	1,020	17.05/2.84	6-30	5.32

**Table 3. Participants' Responses on the Sustainability Attitude Items (%).**

	Strongly Disagree	Disagree	Have No Idea	Agree	Strongly Agree
<b>Concern/worried (1-4)</b>					
1) The environmental issues are over exaggerated.	23.3	21.6	7.2	27.6	20.1
2) Human beings have the right to exploit nature's resources according to our needs.	16.9	22.7	14.5	30.9	14.7
3) I am concerned about the extinction of some living species.	2.4	2.7	2.6	31.2	60.8
4) It is not important if some species which are not useful for human needs become extinct.	36.9	9.7	5.1	16.7	31.0
<b>Social responsibility (5-7)</b>					
5) I am concerned about the unequal use of resources in the World.	1.5	3.1	7.4	38.8	49.0
6) I would like to participate in local environmental events voluntarily.	0.8	7.2	12.0	45.5	34.0
7) I am willing to make sacrifices for sustainability (such as paying more tax etc.).	8.0	11.5	21.3	36.5	22.4
<b>Locus of control (8-10)</b>					
8) I believe I can contribute to the quality of the environment through my personal behavior.	2.1	9.9	17.8	39.4	30.6
9) The individual's intention does not impact environmental issues.	24.2	21.8	13.7	28.7	11.3
10) Individual sacrifices have no effect on sustainability.	25.4	18.6	9.1	27.1	19.4

**Table 4. Participants' Responses on the Sustainability Behavior Items (%).**

	Never	Very Seldom	Sometimes	Very Often	Almost Always
<b>Consumption Pattern (1-5)</b>					
1) Separate out waste for recycling (e.g. organic waste, plastic etc.)	2.7	5.1	22.5	29.5	39.9
2) Re- use of writing paper as scrap paper.	6.0	12.8	27.1	27.9	26.0
3) Purchase "environmentally friendly" products such as recyclable packaging.	2.2	10.8	32.9	34.1	19.7
4) Choose sustainable food such as local, seasonal and fair trade.	3.6	12.4	34.5	31.1	18.2
5) Consider label information in my shopping choices.	6.9	15.9	25.3	28.0	23.7
<b>Household Use (6-8)</b>					
6) Turn off lights and electric appliances when not in use.	0.2	2.7	8.2	30.7	57.9
7) Adopt water saving at home (turn off when brushing teeth, washing dishes etc.).	0.8	3.5	10.8	32.9	51.7
8) Do not use the washing machine until I have a full load of dirty laundry.	1.9	4.7	11.9	27.1	54.2
<b>Participation (9-14)</b>					
9) Donate used items to charity for re-use.	6.2	10.2	22.7	30.2	30.4
10) Volunteer at local environmental events such as Nature Trust, environmental training etc.	26.8	29.4	23.0	11.5	9.0
11) Read articles and watch TV programs on environmental issues.	4.3	11.6	31.1	32.6	20.2
12) Participate in climate-awareness campaigns.	41.9	23.9	19.6	8.6	5.8
13) Protest against damaging environmental government policy.	44.1	20.0	19.6	9.0	7.0
14) Confront people who litter in public spaces or damage the environment in any manner.	18.1	14.7	24.1	23.1	19.7

**Table 5. Mean and Standard Deviation of Sustainability Knowledge Dimension.**

Dimension	N	X	Range (Min-Max.)	SD
Sustainability Knowledge (SK)	1,023	5.71	0-10	1.81
Environmental Processes (1-4)	1,023	2.73	0-4	1.06
Natural sources and human use (5-8)	1,023	2.08	0-4	0.99
Environmental degeneration (9-10)	1,023	8.922	0-2	0.70

sustainability literacy scores according to gender, nationality, place and department were analysed by using t-test and ANVO test.

## **Results**

In this study, the findings are presented in the following order; firstly, the means and standard deviations of the dimensions and their sub-dimension.

In the **Table 2**, the mean score for the participants' responses to a 10 five- point Likert type items was transformed to five-point Likert scale. Accordingly, the mean of SA was found as 3.54 that means nearly "agree". The means scores calculated for the sub-dimensions of SA such as concern-worried, social responsibility and locus of control are 3.36, 3.96 and 3.33, respectively. The mean score of SB was found to be 3.43 while the mean scores for its sub-dimensions were found to be 3.61, 4.33, and 2.84. Lastly, the mean score of the participants for SK was found to be 5.93.

Findings related to the extent of the agreement with the statements regarding each item of sustainability attitude are presented in **Table 3**.

Using data from **Table 3**, the following evaluations can be made based on items representing different dimensions of SA:

While statements such as "The environmental issues are over exaggerated", "Human beings have the right to exploit nature's resources according to our needs" and "It is not important if some species which are not useful for human needs, become extinct" are strongly refuted by the majority. The statements such as "I am concerned about the extinction of some living species" are strongly approved by the majority.

The statements related to social responsibility sub-dimension such as "I am concerned about the unequal use of resources in the World", "I would like to participate in local environmental events voluntarily" and "I am willing to make sacrifices for sustainability (such as paying more tax etc.)" are strongly agreed by the majority of the participants. This trend indicates that majority of the participants seems to be concerned about social issues related to sustainability.

The responses to the negative statements of the locus of control sub-dimension such as "The individual's intention does not impact environmental issues" and "Individual sacrifices have no effect on sustainability" were divided almost equally into agreement and disagreement groups. In contrast, the statement namely "I believe I can contribute to the quality of the environment through my personal behaviour" is agreed by majority of participants.

The following table presents the scores for the participants on the sustainability behaviour items.

As can be seen from **Table 4**, the majority of participants seem to display sustainable daily life practises in terms of consumption pattern in a

frequency ranging from “sometimes” to “almost always”. It indicates that majority of the participants are concerned about sustainable consumption patterns in their daily life. Likewise, the participants tend to consider sustainable household use practises such as “turn off lights and electric appliances when not in use”, “adopt water saving at home (turn off when brushing teeth, washing dishes etc.)”, “do not use the washing machine until I have a full load of dirty laundry” in a frequency ranging from “very often” to “almost always”. On the other hand, the participants seem to participate in events such as “donate used items to charity for re-use read articles” and “watch TV programs on environmental issues”. However, they don’t much engage with voluntary activities such as “volunteer at local environmental events such as Nature Trust, environmental training etc.” and “protest against damaging environmental government policy”.

Lastly, the mean and standard deviation scores about sustainability knowledge and its sub-dimensions are presented below:

As can be seen from **Table 5**, the mean score of participants taken from SK is 5.71. Also, the participants correctly answered nearly half of the questions. Indeed, almost three of the four questions related to environmental processes were answered correctly. On the other hand, nearly half of the questions regarding natural sources and human use and environmental degeneration were answered correctly.

To understand more clearly the participants’ level of SK, their answers are presented as incorrect and correct in the following table.

As can be seen in **Table 6**, the majority of the participants (between 60% and 88%) correctly answered the questions related to basic ecological processes such as “Which of the following is not true about ecosystems?” and “Which of the following living creatures transform organic waste to inorganic compounds in nature?” Indeed, the fourth question was answered by more participants than the others. However, almost half of the participants couldn’t give correct answer to the question regarding the relationship between all living systems in the nature.

The majority of the participants (between 63% and 69%) answered correctly the questions regarding the environmental sources and human use. But, the questions related to “the population theory and bio capacity - footprint” were not answered correctly by the majority of the participants (between 59.7% and 64.6%). Especially, the participants couldn’t comprehend subjects regarding to bio capacity and human footprint.

Lastly, the questions regarding to environmental degeneration weren’t answered correctly by the majority of the participants (between 50.7% and 60%). Especially, the great majority of the participants expressed a misconception about the reason of climate change because the majority suggest that the climate change is caused by depletion of stratospheric ozone.

**Table 6. Participants' Responses on the Sustainability Knowledge (SK) Items.**

Items	Incorrect (%)	Correct (%)
<b>Ecological Processes (1-4)</b>		
1) Which of the following is not true about ecosystems? (a) In an ecosystem energy is recycled (b) In an ecosystem materials are recycled (c) The size of populations in nature is limited by the amount of food (d) The base of the food web is consumers	39.4	60.0
2) Which of the following living creatures transform organic waste to inorganic compounds in nature? (a) Plants (b) Animals (c) Microbe (d) Mushroom	35.1	64.8
3) Which of the followings best define the relationship between all living systems? (a) inter-connection (b) competition (c) fitness (d) cooperation	41.9	57.9
4) Which of the following does not break down in nature? (a) organic waste (b) cotton clothes (c) plastic (d) paper products	9.8	88.8
<b>Natural Resources and Human Use (5-8)</b>		
5) Which of the following energy sources are used most? (a) fossil fuels (b) Natural gas (c) Solar energy (d) Nuclear energy	30.9	69.0
6) Which of the following resources used least frequently? (a) Soil for food (b) minerals for technology products (c) water for industrial production (d) animals for transportation	35.8	63.8
7) Who developed the "theory of human population", which stated that at some point there would be too many people alive? (a). C. Darwin (b) T.R. Malthus (c) H. Spencer (d) A. Smith	59.7	40.0
8) Please answer the following questions according to the following formula. Field (F) x biological productivity (BP) = Biocapacity (A) Population (P) x Consumption per capita (C) x Concentration of waste (W) = Ecological footprint Which of the following is least accurate, given the above statement? (a) Biocapacity means productive area size, which sustains life on the planet. (b) Ecological footprint means total human effect on nature (c) difference between B and A defines ecological deficit d) the area of (A) is bigger than of (B)	64.6	34.7
<b>Ecological Degeneration (9-10)</b>		
9) Which of the following statements is not true? (a) depletion of stratospheric ozone causes climate change (b) use of pesticides causes water pollution (c) burning of fossil fuels causes air pollution (d) destroying of habitats causes loss of biodiversity	60.0	39.1
10) Which pollution is the most difficult to perceive? (a) physical p. (b) biological p. such as contamination of microbe (c) chemical p. such as contamination of some chemicals (d) visual p.	50.7	49.3

The results of the independent samples t-test conducted to determine whether the sustainability scores of the participants vary significantly depending on the variables of gender, nationality and place are presented in **Table 7**.

As seen in **Table 7**, the mean values regarding to SA vary significantly depending on gender, nationality and place in favour of the female and British students and the students having spent the longest time in urban during their childhood. The mean scores taken from SB are significantly higher for the female and British students. The mean scores taken from SK are higher for the Female and British students.

**Table 7. Results of the t-Test Conducted to Determine Whether Sustainability Scores Vary Significantly depending on Nationality, Gender and Place.**

Dimension	Variable	n	X	SD	p
Sustainability Attitude	Female	660	35.59	6.69	0.000
	Male	348	33.65	6.16	
	British	516	39.73	5.22	0.000
	Turkish	496	29.98	3.38	
	Urban	626	33.84	6.30	0.000
	Rural	387	36.72	6.61	
Sustainability Behavior	Female	660	48.71	8.31	0.003
	Male	348	46.98	9.84	
	British	517	45.97	7.89	0.000
	Turkish	495	50.28	9.32	
	Urban	624	48.55	8.91	0.049
	Rural	389	47.42	8.87	
Sustainability Knowledge	Female	663	5.82	2.29	0.044
	Male	346	6.13	2.26	
	British	515	5.29	1.95	0.000
	Turkish	498	6.59	2.37	
	Urban	628	5.92	2.29	0.907
	Rural	386	5.94	2.27	

**Table 8. Results of the ANOVA-Test Conducted to Determine Whether Sustainability Scores Vary Significantly depending on Department.**

Department	1:218(n)	2: 235(n)	3:186(n)	4:222(n)	5:81(n)	6:81(n)
SA Mean	34.53	35.75	38.02	32.57	33.91	34.17
SA Mean Difference	3.51*(1-3) 2.00*(1-4)	-2.36*(2-3) 3.15*(2-4)	5.52*(3-4) 4.13*(3-5) 3.88*(3-6)			F: 0.000
SB Mean	46.73	47.47	48.36	49.60	49.41	47.80
SB Mean Difference	-2.95*(1-4)					F: 0.012
SK Mean	6.06	5.46	6.11	6.04	5.88	6.28
SK Mean Difference	0.775*(1-5)	-0.784*(2-3) -0.804*(2-4) -0.720*(2-5) -0.670*(2-6)				F: 0.013

Note

Department: 1: Health, 2: Social Sciences, 3: Environmental Sciences, 4: Education, 5: Positive Sciences, 6: Computer and Engineering

The results of the ANOVA-Test conducted to determine whether the sustainability scores of the participants vary significantly depending on the variable of department are presented in **Table 8**.

As can be seen in **Table 8**, the sustainability attitude means scores of the students attending the Departments of Health Sciences, Educational Sciences and Environmental Sciences vary significantly in favour of the students attending the Department of Health Sciences. On the other hand, the mean scores of the students attending the Departments of Social Sciences and Environmental Sciences were found to be significantly different in favour of the students attending the Department of Environmental Sciences and the mean scores of the students attending the Departments of Educational Sciences and Social Sciences were found to be significantly different in favour of the students attending the Department of Social Sciences. The sustainability attitude means scores of the students attending the Departments of Environmental Sciences, Educational Sciences, Positive Sciences and Computer/Engineering were found to be significantly different in favour of the students attending the Department of Environmental Sciences.

The sustainability behaviour means scores of the students attending the Departments of Health Sciences and Educational Sciences were found to be significantly different in favour of the students attending the Department of Health Sciences.

The sustainability knowledge means scores of the students attending the Departments of Health Sciences and Positive Sciences were found to be significantly different in favour of the students attending the Department of Health Sciences. On the other hand, the sustainability knowledge mean scores of the students attending the Department of Social Sciences and the other departments were found to be significantly different in favour of the students attending the other departments.

## **Discussion**

The mean scores taken from the dimension of sustainable attitude (SA) show that the participants have a positive attitude towards the situations related to sustainability issues. In particular, the situations corresponding to the “concern-worried, social response ad locus of control” sub-dimensions SA dimension are generally adapted to a large extent. However, it is seen that the participants are more engaged in situations related to social response than concern-worried and locus of control. These findings are generally parallel to the related literature (Erdogan and Ok, 2011; He et al., 2011, Balci, 2012; Esa, 2010; Veisi et al., 2019, Sousa et al., 2021). However, it is contradictory that while the positive items related SA were largely approved, the participants remained hesitant about the negative items. This may be due to the distracting feature of the negative items.

Participants declared that they exhibited behaviours related to the sustainable behaviour (SB) dimension “very often”. However, it is noted that the participants are not so willing to participate in sustainability processes.

For example, it was stated that sustainable domestic behaviours such as “turn off lights and electric appliances when not in use”, “do not use the washing machine until I have a full load of dirty laundry” are frequently exhibited. In contrast, it was seen that social responses related to sustainability situations such as “volunteer at local environmental events such as Nature Trust, environmental training etc.”, “protest against damaging environmental government policy” are rarely demonstrated. Similarly, Janmaimool and Kha-johnmanee (2019) stated that students often behave more environmental friendly in their daily life activities, house hold use etc. In contrast, they don't engage in participating in campaigns and demonstration for sustainability issues willing (Goulgouti et al., 2019).

Lastly, the participants' responses to the questions regarding sustainability knowledge (SK) indicate that the half of them own insufficient knowledge or some misconceptions about environmental processes, natural sources-human use and environmental degeneration. In this regard, the majority of the participants answered correctly the questions about the energy flow, food chain, matter cycle, recycling etc., while almost half of them didn't answer correctly the question about the relationships between all matters in the nature such as inter-connection, competition, fitness, cooperation etc. Similarly, the majority of the participants answered correctly the questions related to environmental sources and human use however they couldn't answer the questions about population's theory and bio capacity-human footprint relationship. As expected, the majority of the participants have misconception about the reason of climate change because they suppose climate change is caused by depletion of stratospheric ozone. Likewise, numerous studies such as the ones by Esa (2010), Teksoz et al. (2014), Veisi et al. (2019), Esa (2010), Teksoz et al. (2014) and Veisi et al. (2019) pointed out that participants could answer the easiest basic questions related to ecosystem while they have difficulty understanding the relationships in the nature and human affects.

There is a gap of cross-nation studies investigating the status of sustainability literacy of students specially. Thus, shifting toward sustainability depends on the explorations and enhancements of sustainability literacy globally. In this study, it was found, that the British participants seemed exhibiting more positive attitudes and less positive behaviours while the Turkish participants have fewer positive attitudes and more positive behaviours. This finding wasn't not totally confirmed by related literature such as Freymeyer and Johnson (2010), Oreg & Katz-Gerro (2006), Pirani & Secondi (2011). This unexpected finding in the study can be explained by the behavioural patterns of industrial societies such as the United Kingdom because the attributes of a society such as development, welfare level etc. could predict the attitude, behavior and knowledge regarding to sustainability issues (Pisano & Lubell, 2017). Compared to the United Kingdom, Turkey indus-

trialized and urbanized later. The fact that the UK students tend to exhibit fewer examples of SB can therefore be seen as one of the consequences of being a long-term industrial society.

On the other hand, the fact that Turkish students respond to SK questions more easily than the British students can be attributed to the fact that the education system in Turkey is carried out on the basis of a more intensive curriculum.

When the findings are evaluated in terms of gender, place where the longest part of childhood is spent and department attended, the following comes to the fore.

The studies conducted by Cho (2007), Erdogan (2013), Ozturk and Tokgoz (2016), Teksoz, Sahin, and Ertapinar (2010), Cotton, Miller and Valle (2018), similarly the findings in the current study, show that the female participants appear to reflect more positive attitude and sustainable behavior than male participants regarding to environmental; that is, sustainability literacy. However, female participants have a greater difficulty understanding than male participants as Al-Naqbi and Alshannag (2018), Choe et al. (2020) and Sousa et al. (2021) pointed out. This finding could be explained in terms of both socialization-based theory and structural theory (Zellezny et al., 2000) that emphasized the different role of gender in society generally.

The place where the adults lived for the longest period during childhood could be a determinant of their relationships with and behaviours towards nature. In the current study, the participants spent longer time in rural areas during their childhood seem to have more positive attitudes to sustainability issues than the ones spent longer time in urban areas during their childhood. This finding is also supported by place-based approaches such as Smith and Sobel (2010) and Love (2010). The deficit between attitude and behaviour could be explained in terms of various obstacles for SB in daily live. This finding indicated the importance of nature experience based environmental education for improving sustainability literacy.

Firstly, the transition toward sustainability requires an interdisciplinary approach interlinking different aspects such as economical, ecological, social and cultural. From this perspective, this study investigated in Britain and Turkey whether the sustainability literacies of the university students enrolled in different departments such as health, social sciences, environmental sciences, education, positive sciences, computer and engineering differ. Accordingly, health students seem to have more positive attitude than environmental sciences and education students. In contrast, student teachers like be behave more sustainable than health students. This discrepancy might be caused by the deficit between attitude and behaviour. On the other hand, the students in environmental sciences reflect higher and positive attitude than social sciences compared with education students as well as they have more positive attitude than computer/engineering sciences. As expected, this

finding show that environmental science students appear more concerned with sustainability issues than others in general. On the other hand, as Cotton, Miller and Valle (2018) stated, the SK level of social sciences students seems to lower than others in general.

## Conclusion and Recommendations

The differences of participants' sustainability literacy in the dimensions of SA, SB, and SK with respect to nation, gender, place and department guide showed how sustainability literacy could be improved globally. On the other hand, the higher level of female participants in terms of SA and SB confirm the power of female for transition toward sustainability. The result that the participants who lived in rural for the longest period during childhood have more positive attitude than others underlines the important of nature experience for improving sustainability literacy. In contrast, the finding that more sustainable behaviors among the participants with the longest periods of urban experiences explains urgency of the emergence of sustainability in urban life. Another remarkable finding is to consider the deficit between attitude and behavior, as several studies stated. Future studies could make the interaction between both dimensions more obvious.

Summarily, in this study, the redefining the terminology related environmental education and environmental literacy as sustainability education along with sustainability literacy may contribute to transform related literature and education practice toward the direction of sustainability future vision. The results herein obtained, set a starting point to evaluate and enhance of sustainability literacy in light of SDG goals at cross-nation level.

The following suggestions can be made in order to increase the sustainability literacy of students with sustainability education globally:

- *There is a need to develop a sustainability education curriculum based on cross-disciplinary and cross-cultural content in light of SDG goals.*
- *There is a remarkable uncertainty about how sustainability education can be implemented. For this, best models/materials that could guide sustainability education should be designed and implemented within international collaboration.*
- *The permanence of learning outcomes as sustainability literacy should be monitored and evaluated within alternative tools.*

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# Foreign Language Speaking Anxiety and Its Link to Speaking Self-Efficacy, Fear of Negative Evaluation, Self-Perceived Proficiency and Gender

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**Abstract:** This research study aimed to explore the speaking anxiety of Turkish learners of English as a foreign language (EFL) and its relation to EFL speaking self-efficacy, fear of negative evaluation (FNE), self-perceived English speaking proficiency, and gender. 293 (132 females, 161 males) university-level EFL students completed the EFL speaking anxiety scale, EFL speaking self-efficacy scale, and FNE scale. Four main findings were obtained as a result of the statistical analyses: (i) students' speaking anxiety had a negative relationship with both self-perceived oral English proficiency and speaking self-efficacy, (ii) a positive relationship was determined between FNE and speaking anxiety, (iii) EFL speaking anxiety was found to be lower in boys than in girls, and (iv) speaking self-efficacy, FNE, and self-perceived oral proficiency were identified as meaningful predictors of students' EFL speaking anxiety. In light of these findings, the study offers some pedagogical implications.

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**Keywords:** EFL Speaking Anxiety, Speaking Self-Efficacy, Fear of Negative Evaluation, Self-Perceived Proficiency, Gender

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## **Introduction**

**M**ANY scholars in the second language acquisition field claim that affective factors (e.g. self-confidence) are as crucial as linguistic and cognitive factors in second/foreign language (L2) learning process (see Gass et al., 2013; MacIntyre & Gregersen, 2012; Pawlak, 2017). Therefore, these factors have been heavily researched. Mercer et al. (2012) have defined affective variables as the “non-cognitive factors that may influence second language acquisition, which are connected to emotions and feelings (these may include boredom, anxiety, shyness, embarrassment, or low self-esteem)” (p. 248). To date, among these affective variables, L2 learning anxiety has been one of the most interesting and popular topics of research (Daubney et al., 2017; Horwitz et al. 2010; MacIntyre, & Gregersen, 2012; Teimouri et al. 2019). Although stating that foreign language anxiety (FLA) is connected to the “communication apprehension, test anxiety, and fear of negative evaluation”, Horwitz et al. (1986) consider it “as a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process” (p. 128). As for MacIntyre and Gregersen (2012), L2 anxiety is “a term that encompasses the feelings of worry and negative, fear-related emotions associated with learning or using a language that is not an individual’s mother tongue” (p. 103). In other words, it is the worry or fear experienced by L2 learners while learning, and more specifically, speaking and listening to the target language (MacIntyre & Gardner, 1994). The crucial point here is that anxiety is especially common when speaking L2 in foreign language learning contexts (see Mak, 2011; Suleimenova, 2013). Many studies (e.g. Liu & Jackson; 2008; Tianjian, 2010), have found that FLA causes students to avoid communication in L2. Therefore, understanding L2 speaking anxiety and the other factors associated with it is essential to make the foreign language learning journey more fruitful and successful for learners.

When the literature is examined, we can say that studies conducted on general FLA have enriched our understanding to a greater degree so far. However, there is a considerable need for studies that directly focus on foreign language speaking anxiety and other factors related to it. With its unique and complex features, it has been demonstrated that FLA is related to many independent variables (Jiang & Dewaele, 2020), and determining the role of different variables, especially on L2 speaking anxiety, can help us understand how to best support learners. Based on these facts, this study intends to extend and contribute to the literature in terms of L2 speaking anxiety by examining university-level Turkish EFL learners’ speaking anxiety and its relation to the following variables: EFL speaking self-efficacy and FNE as affective variables, self-perceived English speaking proficiency as a language-related variable, and gender as a socio-demographic variable.

These variables were chosen because it is yet unclear to what degree they are associated with foreign language speaking anxiety. Taking that into consideration, this study hopes to make a valuable contribution to a more comprehensive understanding of EFL speaking anxiety by focusing on all of these variables, which have not been evaluated together in many previous studies, in a single study and in the same sample of participants.

## **Foreign Language Speaking Anxiety and Self-Efficacy**

One affective factor that is critical for the L2 learning process and is closely associated with FLA is L2 self-efficacy (Brown, 2007; MacIntyre & Gregersen, 2012). In a well-known quote from Bandura (1997), self-efficacy is described as “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p. 3). Mercer et al. (2012) define it as “an individual’s perception of or belief about his/her capabilities to complete a specific task successfully” (p. 252). When self-efficacy is considered in the L2 learning context, it is commonly explained as learners’ beliefs and thoughts about their skills and abilities to accomplish a given task in the target language (Wang et al., 2014). People’s actions, thoughts, motivations, and feelings when doing something are affected by their self-efficacy (Bandura, 1995). Therefore, when a person believes that s/he has competence and ability to complete a given task successfully, i.e., when s/he has sufficient self-efficacy, then s/he may make an effort and show persistence and determination to complete that task (Bandura, 1997). Considering this, it can be said that self-efficacy serves a crucial function during the L2 learning experience because it is a highly demanding and challenging process for learners.

Many research studies (e.g. Kitikanan, & Sasimonton 2017; Mills et al., 2007) have highlighted that a positive interaction exists between self-efficacy and foreign language proficiency and achievement. Concerning the connection between FLA and self-efficacy, studies (e.g. Anaydubalu, 2010; Jee, 2019; Mede & Karairmak, 2017; Ozer, & Akcayoglu, 2021; Shih, 2019; Wang et al., 2021) have generally found that they are negatively correlated. High levels of L2 anxiety may cause learners to lose their confidence in terms of their language competence and reduce their sense of self-efficacy in L2 (Daubney et al. 2017). Similar results were also reported with regard to EFL speaking self-efficacy and anxiety. For instance, Gursoy and Karaca (2018) conducted a study with young EFL learners in Turkey and reported a meaningful and negative relationship between speaking self-efficacy and speaking anxiety in English. Likewise, Tianjian (2010) carried out research to examine Chinese EFL learners’ speaking anxiety and its relation to different variables, concluding that speaking anxiety was negatively associated with speaking self-efficacy. A few studies have produced results that contra-

dict these findings. For instance, Cubukcu (2008) found that there was not a significant correlation between foreign language classroom anxiety and foreign language self-efficacy. Also, Tahsildar and Kabiri (2019) found a positive relation between students' EFL speaking anxiety and self-efficacy. These contradictory results emphasize the need for more studies on this topic.

## **Foreign Language Speaking Anxiety and Fear of Negative Evaluation (FNE)**

Another affective factor linked to L2 anxiety is the FNE, which can be defined as people's anxiety about the probability of others judging and evaluating them unfavourably and negatively; a high level of FNE causes people to avoid situations where they may face the possibility of negative assessment by others (Leary, 1983; Watson, & Friend, 1969). Since the classroom environment is a social context and open to evaluation (e.g. peer evaluation, teachers' academic evaluation), speaking in L2 classes can be accompanied by the FNE (Horwitz et al., 1986). With respect to this, many studies (e.g. Aida, 1994; Aydin, 2008; Gkonou, 2014; Kitano, 2001; Mak, 2011) have demonstrated that FNE and FLA are positively correlated. For instance, Aral and Arli (2019) reported in their study that FNE affected EFL learners' language anxiety directly and positively, more simply, the higher the degree of FNE, the greater the rate of EFL anxiety. Also, Aydin (2008) conducted a study to explore the FLA and FNE of university-level Turkish EFL learners (n=112). In the findings of the study, FNE was reported as one of the major causes of learners' FLA. Aydin (2008) emphasized that students had a fear of speaking English in class in front of their teachers and friends due to the worry and anxiety brought by FNE. Likewise, in their study with Chinese EFL learners, Liu and Jackson (2008) reported that some students were anxious in English classes, had FNE, and were worried about speaking English in class. Their study indicated that students who were afraid of negative judgement felt more fearful and insecure when speaking English in public. Additionally, Gkonou (2014) revealed in her study with 128 Greek EFL learners that there was a strong correlation between FNE, speaking anxiety, and general language anxiety, and it was stated that when learners' FNE and speaking anxiety increased, their language anxiety also increased.

## **EFL Speaking Anxiety and Self-Perceived Speaking Proficiency**

Horwitz et al. (1986) emphasize that anxiety can negatively affect success in foreign language learning, exactly like in other academic fields (e.g. mathematics). When learners have a high degree of FLA, this may cause them to

have difficulty producing and understanding the target language (Daubney et al. 2017; Dewaele, 2012). These claims were supported by the outcomes of many studies (e.g. Dewaele, 2007; Jiang & Dewaele, 2020; Hu et al., 2021; Shao et al., 2013; Teimouri et al., 2019) that reported a negative relationship between overall L2 anxiety and achievement. Similarly, the negative link between L2 anxiety and self-perceived overall L2 proficiency was also stressed in various studies (e.g. Dewaele & Shan Ip, 2013; Liu, & Jackson, 2008; MacIntyre et al., 1997). As for studies specifically related to self-perceived L2 speaking proficiency and anxiety (e.g. Jiang, & Dewaele, 2020; Dewaele & Al-Saraj, 2015; Dewaele et al., 2008), the common finding was that there was a noteworthy negative association between self-perceived oral L2 proficiency and FLA. In other words, students who stated that they had a higher level of oral English competence were found to be less anxious. Similarly, Gkonou (2014) stated that Greek EFL students who believed that their speaking proficiency was low were found to have high anxiety in speaking.

## **Foreign Language Speaking Anxiety and Gender**

In addition to the affective and linguistic variables, gender as a sociodemographic variable and its link to L2 speaking anxiety also necessitates investigation because there are many contradictory results on the function of gender factor in L2 anxiety in the literature (Tianjian, 2010). In studies that belong to Jiang and Dewaele (2020), Dewaele and Al-Saraj (2015), Dewaele and Shan Ip (2013), and Matsuda and Gobel (2004), gender was not found to be a factor that had an impact on foreign language classroom anxiety. Similar to this, in Tianjian's study (2010), EFL speaking anxiety levels did not differ significantly between females and males. Gursoy and Karaca (2018), in their study with Turkish EFL learners, did not find a difference between girls and boys concerning speaking anxiety. Contrarily, the research of MacIntyre et al. (2002), which was conducted with students in grades 7, 8, and 9 in Nova Scotia, Canada, found that in the 9th grade classes, boys had higher levels of L2 anxiety when compared with girls. In their study on foreign language speaking anxiety, Tercan and Dikilitas (2015) reported that compared to males, female students had a little more anxiety when speaking English. These conflicting results call for further research on this issue as well.

## **Research Questions**

This study addresses the four research questions (RQ) below:

*RQ 1. What is the relationship between Turkish EFL learners' speaking anxiety, speaking self-efficacy, and FNE?*

*RQ 2. What is the relationship between EFL speaking anxiety and self-perceived English speaking proficiency?*

*RQ 3. Do participants' speaking anxiety levels differ by gender?*

*RQ 4. Which of these three independent variables (i.e. speaking self-efficacy, FNE and self-perceived speaking proficiency) are predictors of learners' speaking anxiety?*

## **Methodology**

### ***Participants***

The participants of the study consisted of 293 (females = 132, 45.1%; males = 161, 54.9%) English preparatory school students of a state university located in a mid-sized city in central Turkey. They were EFL learners, and their average age was 19.1. The participants were enrolled in various undergraduate programs at the university, such as computer engineering, aircraft engineering, industrial engineering, aviation management, international relations and so on. They had to complete English preparatory school before starting their undergraduate courses. The English preparatory program provided students with a total of 30 hours of English lessons per week, including 6 hours of listening and speaking lessons, 6 hours of reading and writing lessons, and 18 hours of main course lessons. As the study data were collected at the end of the first academic semester, the participants were considered to be sufficiently experienced to respond to all the survey questions, especially those that are related to speaking anxiety, self-efficacy, and self-rated speaking proficiency. All the included participants consented to take part in this study.

### ***Research Instruments***

The questionnaire had 4 parts: (i) the participants' demographic information (e.g. gender, age), their undergraduate programs and their self-rated speaking proficiency in English; (ii) the Foreign Language Speaking Anxiety Scale; (iii) the Self-efficacy Scale for English (speaking dimension) and iv) the Brief Fear of Negative Evaluation Scale.

*Foreign Language Speaking Anxiety Scale:* The foreign language classroom anxiety questionnaire was originally designed by Horwitz et al. (1986) to measure and examine the general foreign classroom language anxiety level of learners. The scale, using a 5-point Likert scale and consisting of 33 items, was adapted to Turkish by Aydin (1999). However, studies conducted by Saltan (2003) and Ozturk (2012) aimed to measure and focus

on the learners' foreign language speaking anxiety level, rather than their general foreign language classroom anxiety level. Therefore, after ensuring that the Turkish translation of the scale was clear and understandable, these studies selected and used 18 items from the original scale that were determined to be directly relevant to learners' foreign language speaking anxiety. The current study used Ozturk's scale to measure EFL speaking anxiety levels. The scale is a 5-point Likert scale, extending from "strongly disagree (1)" to "strongly agree (5)". Example items from the scale include statements like "I never feel quite sure of myself when I am speaking in English classes" (item 1). As for the scale's reliability, Ozturk reported that the Cronbach's alpha reliability result was 0.91. In the present study, it was calculated as 0.947, which shows that the scale is highly reliable. Scores on the scale range from 18 to 90, with a high score pointing to high speaking anxiety.

*Self-Efficacy Scale for English:* Hanci Yanar and Bumen (2012) developed Self-efficacy Scale for English consisting of four subscales to assess and examine learners' self-efficacy beliefs in four language skills. This 5-point Likert questionnaire ranged from "not suitable for me at all (1)" to "totally suitable for me (5)". The current study only used the scale's speaking dimension (6 items) to assess participants' speaking self-efficacy in English. Hanci Yanar and Bumen reported the reliability for the overall scale as 0.97 and for the speaking subdimension as 0.92. In this study, Cronbach's alpha results demonstrated that the speaking self-efficacy scale reliability was 0.84, which indicates that the scale is quite reliable. Scale scores range from 6 to 30, where a high score represents a high speaking self-efficacy level.

*The Brief Fear of Negative Evaluation Scale:* Leary (1983) developed the Brief Fear of Negative Evaluation Scale, and this scale was adapted to Turkish by Cetin et al. (2010). As Leary explains, the scale measures "the degree to which people experience apprehension at the prospect of being evaluated negatively" (p. 371). The adapted scale was composed of 11 items (e.g.; item 3: "I am frequently afraid of other people noticing my shortcomings") and a 5-point Likert scale from 1, corresponding to "absolutely inappropriate," to 5, corresponding to "absolutely appropriate". In Cetin et al.'s study, the reliability analysis of the scale was performed and found as follows: Cronbach Alpha internal consistency (0.84), split-half (0.83), and test retest (0.82). The current study found Cronbach's alpha reliability as 0.889, which shows that the scale is quite reliable. Three items on the scale were reverse-coded as they were negatively worded (e.g. "Other people's opinions of me do not bother me"). The score ranges from 11 to 55, with high scores indicating a high FNE level.

*Self-Rated English Speaking Proficiency:* Self-perceived proficiency is seen "as an alternative measure of FL achievement" (Jiang, & Dewaele, 2020, p. 3). Based on this, the participants self-rated their own English-speaking proficiency on a 4-point scale ranging from poor, moderate, good

**Table 1. Descriptive Values of the Scales.**

	<b>N</b>	<b>M</b>	<b>SD</b>	<b>Range</b>	<b>Cronbach's <math>\alpha</math></b>
EFL Speaking Anxiety Scale	293	51.15	16.37	18-90	0.947
EFL Speaking Self-Efficacy Scale	293	17.80	4.54	6-30	0.840
FNE Scale	293	26.73	8.87	11-55	0.889

**Table 2. Skewness-Kurtosis Values.**

	<b>Skewness</b>	<b>Kurtosis</b>
EFL Speaking Anxiety Scale	0.029	-0.710
EFL Speaking Self-Efficacy Scale	0.117	0.050
FNE Scale	0.457	0.094

to very good. The distribution of the self-rated oral proficiency of the participants was as follows: 18.4% poor, 53.2% moderate, 22.2% good, and 3.1% very good.

The following table (**Table 1**) demonstrates the descriptive values related to speaking anxiety, speaking self-efficacy, and FNE scales.

### ***Data Collection***

The questionnaires for the study were administered to 11 intact classes at the end of the fall semester of the 2019-2020 academic years. The Turkish version of the survey was distributed to the students to ensure that the participants could clearly understand each statement. Paper-and-pencil method was used for the collection of the data, and the completion of the surveys by each class took an average of 10 to 15 minutes.

### ***Data Analysis***

With the purpose of assessing the normality of the variables, measures of skewness and kurtosis coefficients were performed and the relevant values are provided in **Table 2** below.

The variables met the assumptions of normality. An independent sample t-test was performed to analyze the differences between the two groups. The relationships between the variables were examined with the Pearson correlation coefficient. A series of simple linear regression analyses

**Table 3. Correlations among Participants' EFL Speaking Anxiety, Speaking Self-Efficacy, and FNE Levels.**

		<b>EFL Speaking Anxiety</b>	<b>EFL Speaking Self-Efficacy</b>	<b>FNE</b>
EFL Speaking Anxiety	r	1	-0.516	0.456
	p		< 0.001	< 0.001
EFL Speaking Self-Efficacy	r		1	-0.223
	p			< 0.001
FNE	r			1
	p			

**Table 4. Relationship between Participants' Efl Speaking Anxiety Level and Self-Rated English Speaking Proficiency Level.**

		<b>Self-Rated English Speaking Proficiency</b>	
EFL Speaking Anxiety	r	-0.495**	
	p	0.000	

**Table 5. Examination of the Participants' EFL Speaking Anxiety Levels by Gender.**

	<b>Gender</b>	<b>N</b>	<b>M</b>	<b>SD</b>	<b>t</b>	<b>p</b>
EFL Speaking Anxiety	Female	132	56.06	15.63	4.819	< 0.001
	Male	161	47.13	15.91		

**Table 6. Findings of the Regression Analysis.**

	<b>B</b>	<b>SE</b>	<b>β</b>	<b>T</b>	<b>P</b>	<b>R</b>	<b>R<sup>2</sup></b>	<b>F/p</b>
Constant	84.299	3.324		25.359	0.000	0.516	0.267	105.8/ < 0.001
EFL Speaking Self-Efficacy	-1.862	0.181	-0.516	-10.289	0.000			
Constant	28.631	2.712		10.558	0.000	0.456	0.208	76.55/ < 0.001
FNE	0.843	0.096	0.456	8.750	0.000			
Constant	74.279	2.554		29.079	0.000	0.495	0.245	91.48/ < 0.001
Self-Rated English Speaking Proficiency	-10.977	1.148	-0.495	-9.565	0.000			

was conducted to determine the predictive power of the independent variables (speaking self-efficacy, FNE and self-perceived speaking proficiency) on the dependent variable (speaking anxiety). The IBM SPSS Statistics 22.0 program was employed for all the statistical analyses. Additionally, the significance level was set at 0.05.

## **Findings**

The first RQ of the study was concerned with the relationship between the participants' EFL speaking anxiety, EFL speaking self-efficacy, and FNE. The table below contains the results of the Pearson correlation analysis, which was employed to assess the relation between these variables.

As seen from **Table 3**, the results indicate that there exists a significant moderate negative correlation between the participants' EFL speaking anxiety level and EFL speaking self-efficacy levels ( $p < 0.05$ ). As the participants' EFL speaking self-efficacy levels increase, their EFL speaking anxiety levels decrease. In contrast, there is a significant moderate positive correlation between the participants' level of FNE and level of EFL speaking anxiety ( $p < 0.05$ ). As the participants' FNE levels increase, their EFL speaking anxiety levels also increase. The table also demonstrates a significant low negative relationship between the participants' EFL speaking self-efficacy and FNE levels ( $p < 0.05$ ). As the participants' EFL speaking self-efficacy levels increase, their FNE levels decrease.

In response to RQ 2, the following table (**Table 4**) provides results regarding the relationship between self-rated English speaking proficiency and EFL speaking anxiety.

It is apparent from **Table 4** that the participants' EFL speaking anxiety scores and self-perceived English speaking proficiency scores were significantly and negatively related to each other ( $p < 0.05$ ). The correlation was moderate. As the participants' self-perceived English speaking proficiency levels increase, their EFL speaking anxiety levels decrease.

RQ 3 was about whether EFL speaking anxiety varied by gender. Therefore, in order to find out whether female and male students differ with respect to speaking anxiety level, an independent sample t-test was adopted and the findings are presented below.

**Table 5** demonstrates that there is a statistically significant difference between EFL speaking anxiety rates of participants in relation to gender ( $p < 0.05$ ). The EFL speaking anxiety levels of the male participants are less than those of the females. In other words, girls have higher speaking anxiety scores when compared to boys.

RQ 4 focused on the predictors of the students' EFL speaking anxiety. Based on this, a simple linear regression analysis was run with the aim of identifying how much of the variance of the participants' EFL speaking

anxiety level was explained by the independent variables, i.e. EFL speaking self-efficacy level, FNE level, and self-rated speaking proficiency, respectively. **Table 6** displays the findings obtained from the regression analysis.

When **Table 6** is evaluated in detail, it is clearly seen that the EFL speaking anxiety level is predicted by EFL speaking self-efficacy ( $F_{(1,291)} = 105.8$ ;  $p < 0.001$ ). 26% of the total variance in the EFL speaking anxiety level is explained by EFL speaking self-efficacy ( $R = 0.516$ ,  $R^2 = 0.267$ ). The results show that EFL speaking self-efficacy is a significant negative predictor of EFL speaking anxiety. It is also seen that the EFL speaking anxiety level is significantly predicted by the FNE ( $F_{(1,291)} = 76.55$ ;  $p < 0.001$ ). The FNE accounts for 20% of the variance in the EFL speaking anxiety ( $R = 0.456$ ,  $R^2 = 0.208$ ). As can be seen from the table above, the FNE is a positive predictor of EFL speaking anxiety. Additionally, the EFL speaking anxiety level is explained by self-rated EFL speaking proficiency ( $F_{(1,282)} = 91.48$ ;  $p < 0.001$ ). Self-rated English speaking proficiency explains 24% of the variance in EFL speaking anxiety ( $R = 0.495$ ,  $R^2 = 0.245$ ). Self-rated English speaking proficiency significantly and negatively predicts EFL speaking anxiety.

## **Discussion**

This study found a negative relationship between EFL speaking anxiety and self-efficacy levels. This result corroborates the results of a good deal of the studies conducted before (e.g. Gursoy & Karaca, 2018; Tianjian, 2010). The results also revealed that EFL speaking self-efficacy is a negative predictor of EFL speaking anxiety, which supports the findings of previous studies on FLA and speaking self-efficacy (e.g. Jee, 2019). However, this outcome is contrary to that of Cubukcu (2008), who did not find a correlation between FLA and self-efficacy, and Tahsildar and Kabiri (2019), who reported a positive link between EFL students' speaking anxiety and self-efficacy. Here, it is essential to underline that most of the studies in the literature, including the current one, found a negative association between L2 anxiety and self-efficacy. A possible explanation for this might be that, since self-efficacy brings about an important effect on people's feelings (Bandura, 1995), low self-efficacy may cause students to become more anxious when speaking in L2. In the light of these results, it can be said that, if EFL learners believe that they can communicate and use English successfully, this may decrease their anxiety levels in speaking.

As to the connection between the students' FNE and EFL speaking anxiety levels, a positive link between these two affective variables was obtained. Also, as mentioned in the findings section, FNE was a meaningful positive predictor of EFL speaking anxiety. This output is in line with what Aral and Arli (2019) found in their study. Since language learning takes

place in social settings that are open to evaluation, students' speaking anxiety may increase along with their FNE. It can be deduced from these findings that, like speaking anxiety, FNE may play a negative role in the L2 speaking process. Moreover, these results support the views of Aydin (2008), and Liu and Jackson (2008) who emphasized that FNE may hinder students' willingness to speak and engage in communication in English. The outputs of this study also show that when the participants have high levels of EFL speaking self-efficacy, their FNE level tends to be lower. Based on this, it can be said that if a learner believes that s/he can be a successful user and speaker of English, his/her FNE level may decrease.

This study, in accordance with the pre-existing studies (e.g. Jiang & Dewaele, 2020; Dewaele & Al-Saraj, 2015; Dewaele et al., 2008; Gkonou, 2014), demonstrated that the relationship between the participants' EFL speaking anxiety levels and their self-perceived English speaking proficiency levels was significantly negative. In other words, if the learners' self-perceived oral English proficiency levels are high, their speaking anxiety levels are low. It was also seen that self-rated English speaking proficiency was a negative predictor of speaking anxiety. It could be deduced from these findings that if learners feel that their speaking competence is insufficient, they may get anxious while speaking English.

As for the findings on gender and EFL speaking anxiety, the present study revealed that boys had less EFL speaking anxiety than girls. A similar result was also reported by Tercan and Dikilitas (2015). On the other hand, this finding does not support the earlier studies that did not find a noteworthy difference between females and males with regard to FLA (e.g. Jiang & Dewaele, 2020; Dewaele & Al-Saraj, 2015, Dewaele & Shan Ip, 2013; Matsuda & Gobel, 2004) and foreign language speaking anxiety (e.g. Gursoy & Karaca, 2018; Tianjian, 2010). This outcome contrasts with that of MacIntyre et al. (2002) who determined that 9th grade male students had more anxiety in foreign language than their female counterparts. It seems difficult to explain the reasons for these conflicting results. However, knowing whether anxiety varies by gender in their classes can give teachers the opportunity to better understand and assist their students. Further longitudinal research can provide more insights into the connection between gender and EFL speaking anxiety.

## **Conclusion**

The major objective of the study was to investigate the link between EFL students' speaking anxiety and speaking self-efficacy, FNE, self-perceived speaking competence, and gender. The findings demonstrated that while students' EFL speaking anxiety was moderately and negatively associated with their speaking self-efficacy and self-rated speaking proficiency, it was mod-

erately and positively correlated with their FNE. Regression analyses revealed that speaking anxiety was positively predicted by FNE, whereas it was negatively predicted by speaking self-efficacy and self-rated speaking proficiency. The research has also shown that girls had a higher degree of EFL speaking anxiety compared with boys.

All of these findings have considerable pedagogical implications. First, since there are many study findings regarding the unfavourable impacts of anxiety on L2 learning and speaking skill, it seems important for teachers to identify their students' speaking anxiety levels and its main sources (Horwitz et al., 1986). In light of this, teachers should ensure that the classroom environment is free from negative evaluation and that students can comfortably express themselves while using the L2. As anxiety can stem from fear of making mistakes and FNE, teachers should explain to learners that mistakes are natural components of the L2 learning and speaking process. Creating a classroom environment that evokes positive emotions in students can also help reduce student anxiety and fear (see also Tianjian, 2010). In addition, it may be beneficial for teachers to motivate their students to support their peers and to cooperate with each other in the learning and speaking process. Both teacher and peer support can boost students' self-confidence and encourage them to speak without worry. Moreover, as students living in an EFL context like Turkey are not surrounded by sufficient opportunities to use their second language actively during their daily lives, teachers should guide them and provide them with both in- and out-of-class speaking activities and assignments to practice and use the L2 as much as possible. This can be very helpful to enhance the self-confidence of students and to lower their anxiety and FNE related to speaking.

Finally, this study has some limitations and offers some important suggestions for future studies in light of these limitations. For instance, since the current study adopted quantitative methods to investigate students' speaking anxiety and its relation to aforementioned variables, future studies can adopt qualitative methods like interviews to gain a thorough understanding of EFL learners' speaking anxiety. Besides, the generalizability of the findings is subject to certain limitations as the study only includes participants from a university in Turkey. Future studies may include participants from different countries to increase the generalizability of the study. Finally, this study included only university-level students in the study sample. Based on this, further studies can focus on students from different grade levels (e.g. primary school students) to gain more insights into the EFL speaking anxiety and the variables associated with it.

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# The Necessity of Including Life Education in Chinese Basic Education Curricula

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**Abstract:** Teenagers are at a critical stage of physical and mental development. They embody the prospects for the nation. The incorporation of life education into basic education curricula poses positive effects on adolescents' development of a fundamental understanding of life and its purpose. This study aims to provide a brief overview of global practices in life education, review current life education research in China, and analyze the necessity of including life education in adolescent schooling.

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## **Introduction**

**S**OCIAL existence and development depend on the functioning of all individuals' lives. Hence, it is crucial that education set the development of life as its pivotal goal in order to actualize individuals' potential and maximize their contributions to society. Life education has the capability to fuel healthy development and the formation of a positive outlook on life and values in teenagers (Ma, 2013). Currently, a sizeable portion of Chinese adolescents exhibit a lack of sense of meaning in life, lose hope for the future, or even develop suicide ideation. Squandering time and energy is a more prevalent phenomenon among them (Niu, 2011). Issues like these call for the normalization of life education. Incorporating life education into school curricula should become a focus of innovation in basic education.

There is no conclusive definition of life education to date. Academics have attempted to conceptualize it from various perspectives. Xu (2002) argued that life education is an educational activity that should be applied to individuals throughout their life span and used to foster their survival ability and meaning in life so as to enhance their quality of life. According to Liu (2004), life education is intended to inspire the purpose of life and humanistic consciousness in educated people to improve the integrity of their lives. Xiao and Chen (2013) proposed to study life education from the perspective of the "whole life" theory and include survival education, life development education, and death education as its essential aspects. As per their study, life education is not only a subject of discourse but, more importantly, a significant domain of practice. Despite the differences in focus among these arguments, the commonality is also evident, namely, the stress on the connection between education and actual life, the humanistic concern for students, and the importance of awakening their sense of purpose in life. In this study, we define life education as an educative process in which teachers, by tapping into all educational resources available, educate students to understand, appreciate, respect, and treasure life, to improve self-knowledge, and to develop life purpose to enhance the quality of life.

## **Global Status of Life Education**

Globally, life education research derived from death education studies, which evolved into explorations of life-death relations and subsequently initiated life education in primary and secondary schools.

In the United States, the formation of positive views of life and death is treated as an essential component of optimal adolescent development and has been included in K–12 curricula as a critical element of life education (Wang, 2007). Walters (2006) emphasized that life education could help prepare children for the challenges of life and that it should permeate the en-

tire life of individuals. Emotional regulation, character building, and the capability of confronting challenges are the three main components of life education in American schools, which are meant to promote the balanced development of all aspects in students and increase the promise of their growing into happy and responsible individuals.

Australian primary and secondary schools establish specialized offices for the execution of life education with the explicit objectives of educating students to develop rational, objective attitudes towards death as well as other encounters in life, to cherish their lives, and to lead a meaningful life. Furthermore, drug issues are a primary component of life education in these schools, and school education on drug use has become a major resource for the community's drug abuse prevention endeavors. It is intended to instruct students to stay away from drugs and, in the meantime, serve as a drug addiction prevention measure for society as a whole. What's more, building on experts' research results, life education curricula in Australian basic education schools are well-designed, focusing on students' acquisition of self-development abilities, adaptation to societal development, and effective communication with others (Wang, 2007).

Life education in the U.K. adheres to the idea of "whole person" education, an educational theory advocating student holistic development as the primary goal of education. A relatively mature life education system has been established in this country, with curricula centered on civil education and supplemented by health education. Home-school partnerships have been emphasized in student life education. Schools and parents jointly sponsor a variety of activities to intensify students' understanding of the meaning of life. Parents receive instructions on how to integrate life education into their children's day-to-day lives. Schools in the U.K. also pay considerable attention to student death education and have made attempts to improve students' comprehension of death by increasing death-related subject matter in teaching and mimicking the process of death as classroom games (Liu, 2012).

Japanese schools run a significant life education program known as "Extra Education" (He, 2002). Japan has a severe issue with suicide and one of the highest suicide rates among minors in the world, making life education for teenagers overwhelmingly imperative. As a result, life education in Japanese schools places special emphasis on fostering a love of life and courageous attitudes towards challenges in life in students.

Contrary to the aforementioned countries, Germany does not have a specialized section on life education in its primary and secondary school curricula. Instead, it incorporates life education into the "benevolence education" program, which has been a fundamental component of basic education. The core of "benevolence education" is to pursue "public goodness – to care for all living things and to view the combination of humans and their humanistic and natural environment as a grand community of life. "The Love for Small

Animals” serves as the first lesson in benevolence education. Compassion for the vulnerable, leniency towards others, and refusal to use violence are the key contents of this program. In addition, education on death also draws a lot of attention in German basic education (Wang, 2015).

## **Life Education Research in China**

Life education in China has a profound historical heritage. Confucianism advocates “contributing to society and the world, pursuing benevolence and virtue” as the goal of life; Taoism emphasizes the natural state of human life. Theoretical and practical explorations of life education in China, which began in the late 1970s, have produced a plurality of research results. This section of the article seeks to summarize previous research on aspects of the conceptualization of life education, life-education relationships, and education on death.

### ***Conceptualization of Life Education***

Prior studies on the concepts of life education can be classified into four categories. The first category focuses on the association between life education and the goals of education. For example, from the perspective of human-centered education, Xu (2002) argued that life education is an eternal theme in the domain of education, as education is an endeavor seeking to continuously improve the quality of life of individuals. The second category concentrates on discussing the contents of life education. For instance, Fang (2006) defined life education as a synthesis of moral, social, and mental health education, covering a diverse range of topics such as life and safety, life and growth, life and value, and life and humanistic care, etc. The third category focuses on exploring the nature of life education. According to Xiao and Chen (2013), life education is by nature an effort to assist students in determining their purpose in life. It is a novel educational theory rather than merely an instructional subject matter. The fourth category attempted to generalize about the significance of life education. In this category of studies, the importance of life education was evaluated from the perspectives of lifespan education, whole-person education, spiritual education, life meaning education, and more (Liu, 2013).

### ***Relationships between Life and Education***

The relationships between life and education have been heavily discussed in existing research. Cheng (2002) stated that life education is the starting point of overall education; that the state of life can graduate from existence to being with the help of education; that any specifically stipulated educational

objective has the risk of becoming out-of-date; and that the ultimate goal of education is to direct life towards integrity and infiniteness. Gu (2013) stressed that the essence of education is life education, and that life education is not only a matter of educational substance but also a matter of educational philosophy. According to Li (2010), education should work to inspire “life consciousness” in students because individuals with life consciousness can better understand themselves, others, and the environment. Life consciousness should permeate the values, ways of thinking, and behaviors of all teachers and students.

### ***Death Philosophy Education***

A number of researchers studied the possibilities of introducing death education into classroom instruction. Zheng (2009) initiated a course named “Chinese Death Wisdom” in his school, specializing in interpreting a variety of views of life and death. In his doctoral dissertation, Li (2010) proposed that life education should include two aspects: “education about life and death” and “education for life and death”. The former prioritizes the delivery of knowledge about life and death, while the latter emphasizes students applying knowledge about life and death in their practical lives and subsequently developing it into life and death wisdom.

## **The Necessity of Incorporating Life Education in Basic Education Curricula**

### ***An Imperative Reaction to Current Social Issues***

The social nature of humans determines that their personal development is closely intertwined with the social environment (Liu, 2012). In the era of great social transformation, despite the mainstream values of society being healthy and positive, coexisting with them is a degenerate social culture, which is most likely to have a negative impact on teenagers whose outlook on life and the world is immature. Currently, without a clear perception of meaning in life, numerous teenagers feel hopeless about their existence and prospects. Vicious incidents such as self-harm, violence towards others, and animal abuse occur frequently. In response to this situation, it is necessary to refresh and innovate traditional youth education by integrating life education into basic education curricula in order for the national basic education system to adjust to social changes and suit the development needs of society.

## ***A Fostering Factor for the Healthy Development of Teenagers***

Against the backdrop of an increasingly materialistic society with fast-paced lifestyles, effective life education can play a significant role in promoting healthy adolescent development. Burdened with intense academic competitions and interpersonal complications, teenagers unable to ease the pressures in an appropriate way may develop a negative mentality, which can pose detrimental effects on their lives and studies or even pose threats to their lives. Helping teenagers cope with psychological issues and attain healthy physical and mental growth is not only a key objective of life education but also a school's obligation. Life education for adolescents can cover a wide range of subjects, including the origin, process, meaning, and value of life, facilitating their development of a positive understanding of life and, as a result, heightening mental resilience and fostering stronger character.

## ***A Boost to the Outcomes of Basic Education***

A key component of life education is the cultivation of life purpose in adolescents, which is of vital significance for the improvement of educational outcomes. The reform of Chinese basic education is intensifying, aiming to transform educational objectives, patterns, and methods (Gao, 2005). One shared goal among all the reformatory efforts is to make the shift in teaching model from a teacher-dominated to a student-centered instructional paradigm with a focus on student key competency development. The novel teaching paradigm is characterized as goal-directed, requiring the autonomous learning abilities of students. Life purpose education, intended to inspire teenagers to discover and pursue goals that give their lives meaning, can serve as a response to this requirement. McKnight and Kashdan (2009) posited that purpose is a central, self-organizing life aim that organizes and stimulates goals, manages behaviors, and provides a sense of meaning' (p. 242). They identified five roles that purpose in life fulfills, namely, stimulating behavioral consistency, generating target-motivated behaviors, stimulating psychological flexibility, fostering efficient personal resource allocation, and applying higher-level cognitive processing. Unquestionably, students with proper life purpose education have a stronger awareness of commitment, goal-directedness, and personal meaningfulness, which can all contribute to their self-directed learning and academic progress. In addition, teaching students to live purposefully helps encourage holistic development in them by improving their capacities to determine longer-term aims, plan actions to approach these aims, and build the self-efficacy to achieve them. Therefore, efforts to integrate life purpose throughout the student's school experience

may provide an effective route for Chinese teachers and administrators to optimize the outcomes of basic education and fulfill the objectives of educational reform.

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# Life Education for College Students: A Case Study of Life Education in Chinese Universities

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**Abstract:** Life education is crucial to the formulation of the outlook and values of college students. However, Chinese higher education has limitations in life education, such as immature life-education curricula, a paucity of life-education subject matter, and the absence of life purpose among college students. This study seeks to pinpoint the causes of the problems with life education for Chinese college students and propose pertinent suggestions, including the implementation of whole-person education and life-based education, an increase in life education research, the optimization of home life education, and the adoption of new media in life education.

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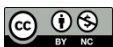
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**L**IFE education is an educational activity that aims to help people understand, revere, and love life, as well as improve survival skills and the quality of life. Its primary purpose is to educate individuals to value their own and others' lives and to equip them with fundamental crisis coping tactics (Li, 2008). Many Chinese universities and colleges have offered life education courses or have established relevant offices to promote life education among students. Due to the relatively short history of life education in Chinese higher education institutions, there is a lack of parameters for it, and its shortcomings are evident. This article raised issues with life education among Chinese college students, analyzed the underlying causes, and came up with relevant recommendations.

## **Challenges in Life Education for College Students**

### ***Immature Life Education Curricula in Higher Education Institutions***

In recent years, there has been a growing incidence of mental problems in Chinese college students, such as sub-health mental states, psychological disorders, and mental imbalances. Inadequate self-knowledge, low morale, and the absence of beliefs are prevalent among them. The root of these issues is the incomplete life education system in higher education. First, current higher education curricula overemphasize students' mastery of disciplinary expertise while disregarding the multidimensional cultivation of comprehensive competencies in them. There is no formal, scheduled life education in place, and its weight remains low in the entire curriculum. Second, student character building, mental health, and spiritual pursuits have been overlooked. Third, crisis response and coping training have been superficial. Lastly, there is a lack of professional life education staff and limited life education instructional materials (Fang & Tian, 2021). Overall, even though the majority of Chinese colleges have incorporated life education into their curricula, current life education emphasizes the actualization of social values in individuals' lives with little guidance on how to construct personal life meaning, manifesting the dearth of humanistic care for students and concern for their spiritual needs in higher education institutions.

### ***Inadequate Life-education Subject Matter***

Despite the fact that a large number of Chinese universities offer elective courses in psychology, ethics, philosophy, and other disciplines that involve life-related issues, there are no well-structured life education-specific courses in operation. Current life education in most universities includes life

safety education and emergency response training, as well as the indoctrination of social values. It is not a comprehensive and targeted instructional design that should cover subjects such as life meaning, self-actualization, resilience against failures, etc. In addition, due to the traditional proclivity to avoid discourse on death in Chinese culture, most schools exclude death education, an integral part of life education, from their life education programs (Zhu, 2009). Only a very small number of students reported occasional exposure to death education, while the majority stated that they had never received any education in this regard. The truth is that the understanding of life-death relations, a key area in life education, is fundamental to the formation of individuals' outlook and values. Life education must provide a reasonable interpretation of death, including its physiological process and significance, to inspire more in-depth contemplations on the value of life in students.

### ***A Lack of Life Purpose among College Students***

Insufficient life education leads to a dearth of life purpose in college students, which is displayed in the following aspects: (i) Weak capabilities of adaptation. A sizeable portion of students have difficulty adapting themselves to college life, with some of them even developing mental psychopathologies like depression and bipolar disorder. (ii) Low stress resistance to some students. A slight increase in academic, economic, emotional, and social pressures is unbearable, which can possibly induce extreme reactions like committing suicide. (iii) The absence of life goals. Notwithstanding the improved materialistic conditions they enjoy, some students fail to set clear goals for their studies and lives, feeling perplexed and powerless. (iv) Low interest in real-world life. In the IT era, many college students choose to indulge themselves in the cyber world and circumvent interactions in real life, resulting in emotional aloofness (Ge & Ping, 2016).

## **Causes of Life Education Issues in Chinese Universities and Colleges**

### ***The Impact of Social Changes on College Students' Values***

The overall social environment in China has undergone unprecedented changes in the past few decades. The market economy has been the most crucial driving force for Chinese social development. While it fuels economic growth and enhances people's quality of life, it poses a negative im-

pact on the traditional ethics and values of Chinese society due to its profit-seeking nature. Its side effects, such as undue utilitarianism and individualism, have the potential to significantly affect the values and behavior of college students who are at the critical stage of forming and developing life meaning (Chu, 2014). Furthermore, alongside the growth of the market economy, the diversity of social culture is intensifying, which can broaden the horizons and enrich the spiritual lives of college students but may also confuse them in their determination of life purpose. Hence, a proper life-purpose education is highly necessitated in higher education curricula. Nevertheless, the current higher education curricula in China have not paid adequate attention to students' spiritual needs and life purpose cultivation, thus having minimal effects on fueling their exploration of life meaning.

### ***Lack of Professional Life Education Capability in College Teachers***

The undesirable efficacy of life education in Chinese colleges is to a large extent related to the low competence in life education among college teachers. Within the examination-oriented educational system, college professors tend to focus on the transmission of disciplinary knowledge. Few of them are aware of the importance of having conversations with students about life purpose to provide guidance for their higher-order understanding of the value of life and to help them actualize life goals. In addition, student affairs personnel at colleges who have day-to-day contact with students for their school routines have the chance and responsibility to administer life education to the latter. However, due to the miscellany of their job responsibilities and the fact that they may have other concurrent positions, student affairs personnel only focus on the management of students' routine events and ignore their personality development, let alone delivering them a life-meaning education. Generally, inadequate teacher engagement is a severe restriction to the effective execution of life education in Chinese colleges.

### ***A Paucity of Life Education by Families***

In the course of the growth of college students, their family environment has a substantial impact on their spiritual development. Recent decades have witnessed tremendous changes in people's lifestyles. The increasingly intricate social interactions and fast pace of work have contributed to the degeneration of familial relationships. This leads to children's defiant attitudes towards their parents and renders home-based life education extremely difficult. In the meantime, the universal utilitarian tendency has also extended to home education. Parents are far more concerned with their children's aca-

demographic results than with their holistic development (Yu, 2001). Parents may communicate with their college-age kids on subjects like personal ambition and career planning but seldom have conversations with them on emotional regulation in interpersonal interactions or reasonable reactions to challenges and failures. Meaningful life education from parents rarely occurs in college students' familial lives.

### ***The Negative Influences of Internet Culture***

College students are among the groups that are most susceptible to the impact of Internet culture. Negative effects of the Internet, such as online gaming addiction, may mislead them in their understanding of the real world and society by blurring the distinctions between the actual world and virtual reality. Also, the wide spread of decadent attitudes via the Internet, such as money worship, hedonism, and egocentrism, is likely to undermine their positive outlooks and values. Furthermore, internet-based communications substantially reduced the chances of in-person interactions. Students' indulgence in cyberspace deprives them of encounters with the external environment, possibly leading to unmet emotional needs and socially deviant behaviors (Zhao et al., 2020).

## **Suggestions for Strengthening Life Education for College Students**

### ***Adhering to the Ideas of “Whole Person” Education and Life-Based Education***

The core of “whole person” education is to foster all-round growth in students (Yang, 2020). Effective education should span all aspects of student development, including personality optimization, character building, willpower training, imagination and creativity cultivation, and life purpose exploration, as well as physical and intellectual development. College is a critical period in students' lives in which they have a big chance to develop positive outlooks, values, and moral principles. Life education should work to comprehensively foster intellectual, emotional, and spiritual development in college students. It is intended to assist in their endeavor to enhance behavior and character alongside their pursuit of academic expertise.

As social creatures, humans cannot isolate their personal development from social realities. No educational activity is independent of social contexts. Life education should derive from life, be executed by life, and be necessitated by life. Life itself is full of educational significance all the time

(Song, 2001). Life-based education is a practice that bases education on actual social life and taps into social resources that facilitate students fostering positive values and exploring the meaning of life. To implement life-based education, college educators should make full use of prime events that occur in school or community settings and guide students to analyze life issues and social phenomena in rational ways with the aim of helping them better adapt to university life and develop problem-analysis and solving capacities. Additionally, it is essential to provide college students with opportunities to put their values into practice. Higher education institutions can enhance students' awareness of social responsibility and capacities to fulfill responsibilities by engaging them in social practice.

### ***Promoting Collaborative Research on Life Education***

Effective implementation of life education is contingent on innovative theoretical research in this regard. The wave of life education emerged as a result of the constant social advancements in China. However, it must be acknowledged that Chinese theoretical research on life education is relatively underdeveloped due to its late start (Huang, 2014). Despite the large number of studies on life education for college students in recent years, the majority of them are theoretical analyses with a lack of applicable measures for the practical implementation of life education. It is imperative to intensify research in this area and innovate in life education subject matter. First, leverage universities' advantage in scientific research. Teaching staff, administrators, and student affairs personnel should all be encouraged to engage in life education research by formulating pertinent research projects. A portion of higher education institutions can set up specialized centers for life education research and implementation according to their academic capabilities. Second, increase inter-college exchanges on life education theories and practices. Teachers should be provided with opportunities to take part in domestic and international conferences on life education to learn from peers' useful experiences. Regular conversations between schools should be held about the progression, issues, and improvements of life education so that they can learn from each other and elevate the effectiveness of life education. Third, emphasize the mutual promotion between life education research and practice. Life education practices provide evidence for research on this subject, which in turn offers guidance and proposals for the former. A mutually beneficial mechanism between life education research and execution should be developed to better explore effective approaches to life education.

### ***Enhancing the Role of the Family in Life Education***

Home is an ideal setting for college students' life education (Wang, 2019). The significance of familial life education lies in its potential to fuel children's healthy growth and development. The role models of parents, home environment, and family heritage all have tacit influences on a child's education. A happy family is a protector of life, whereas an unhappy one can possibly destroy it. To a certain extent, home education has a more far-reaching impact on individuals than formal schooling. It is literally a lifelong education (Yu, 2017). Given this, it is crucial that parents fully understand the value of familial life education and guide their children to face challenges positively and optimistically to foster an upbeat mindset in them. It is imperative to optimize parents' role models and child home experiences and to create a life-valued, life-purpose-focused home environment for the healthy growth of youngsters.

### ***Leveraging New Media in Life Education***

New media technologies have the advantage of being expeditious in transmitting huge volumes of information and free from temporal and special restrictions. The use of new media in life education can substantially expand its sphere. In the IT era, college students' studies and lives are inextricably connected with the Internet. Particularly in the post-pandemic period, online media is gaining weight as a means of academic communication (Huang & Ren, 2022). In the context of the application of new media, knowledge is not only represented by written characters but also by images and videos. The novel instructional paradigm can effectively increase students' interest in life education.

The wide variety of new media, including websites and mobile platforms such as Weibo and WeChat, has the potential to render life education a ubiquitous endeavor and maximize student engagement in it. First, schools can establish life education-specific Weibo or WeChat public platforms through which information about life education can be delivered to students in the form of text, figures, videos, etc. Second, universities can search and screen online life education-related information across the board and give secondary publicity to those top-notch contents on school-based networks and Weibo and WeChat accounts to heighten their influence. Third, new media platforms can be used to make life education programs public to attract more college students, such as visits to memorial halls for eminent historic figures, voluntary service in nursing homes, and life education-themed essay and speech contests. Efforts of these kinds can potentially motivate college students' active and dedicated engagement in life education.

In addition, higher education institutions should contribute more to Internet regulation. Due to their special knowledge background and age, college students tend to be more sensitive to novel ideas and receptive to

emerging cultures than other groups, exhibiting a substantial level of uncertainty about their outlooks and values (Sun, 1998). In the intricate cyberspace environment, college students are susceptible to a variety of misleading concepts. Universities should strengthen their collaboration with network regulation agencies to prevent the dissemination of detrimental information and sanitize their campus-based websites to create an upbeat cyber atmosphere for students.

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