Examining the Relationship between High School Students' Lifelong Learning Tendencies and Problem Solving Self-Appraisal

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Abstract: Lifelong learning, which is an uninterrupted learning approach, means that individuals learn to adapt to changing social, cultural, technological, or economic conditions, and thus advance their lives. Educating individuals as lifelong learners for their equal participation in society is an important educational ideal. For these reasons, it is important to investigate the variables that will facilitate individuals to adopt lifelong learning. The study aimed to reveal experimental results about how positive self-appraisal in problem solving will create a motivation on lifelong learning tendency. In this study conducted on high school students, it was first examined whether the change in perceptions of problem solving and lifelong learning differed according to gender, and then the relationship between these two variables was aimed to be revealed. This study offers important implications about the effect of problem-solving self-appraisal on lifelong learning disposition. According to the findings, individuals with high problem-solving self-evaluation are more inclined toward lifelong learning.

Keywords: *lifelong learning; problem solving appraisal; high school students*

Introduction

A life worthy of human dignity is a human ideal. For this ideal, self-development of an individual in a peaceful environment is a kind of human right. A number of utopian ideals have been designed for individuals to develop their potential to create change at the individual and ultimately societal levels for a better way of being. The concept of lifelong learning is one of these ideals designed for humanity (Elfert, 2018). In addition to being an educational philosophy that recommends individuals to support every stage of their life with learning, lifelong learning is also an important education strategy of the global age (Biao, Maruatona, 2018). Learning is closely related to change and has the potential to overcome challenges, seize opportunities, and ultimately empower an individual by creating new capabilities. Many new situations that arise throughout life require adaptation, and therefore, new learning. Lifelong learners are ready for change to establish a harmonious relationship with the dynamics of life (London, 2011). When individuals encounter familiar situations, they often know what to do without thinking. However, when faced with a new situation, familiar ways are useless. In the face of this problem, the imbalance between the individual and the world disrupts the harmony of the individual with social life. In such a situation, there is a call that prompts individuals to think. In response, individuals need to redesign their behavior, that is, to learn. In a world where change is accelerating, being exposed to different conditions at every stage of life creates the need for lifelong uninterrupted learning (Jarvis, 2009). New conditions caused by economic growth or technological developments create social dissonance. Learning to overcome these social maladjustments provides support for individuals in the face of

problems. In other words, in changing life conditions, individuals are faced with the need to relearn in order to advance their lives (Vargas, 2015). The lifelong learning of individuals is a necessity for the development of society as much as personal development. It is important that the individuals forming the society can learn as a whole and be compatible with each other. A lack of learning causes individuals to lag behind developments, while at the macro level, it causes a disruption in social synchronization (Boeren, 2016). In this context, learning offers a potential that provides the opportunity for individuals to participate in society equally in all areas (Preece, 2015). The concept of lifelong learning, which Unesco put forward as a requirement of the understanding of social justice, has undergone some changes over time. The concept, whose neoliberal variant has been popular in recent years, has been designed and instrumentalized in different ways by different ideologies (Elfert, 2018). In this study, lifelong learning was discussed in line with the understanding of social justice.

Not knowing how to learn limits human action. It causes individuals to be dependent on others and stay out of social life. Learning liberates the potential of individuals by removing these limitations (Bagnall, 2007). Lifelong learning considers people as autonomous agents. It motivates individuals to improve their own lives by evaluating learning opportunities. In this way, individuals, as solution producers, become open to creating new ways that improve life at the individual and social level. It is not possible to adapt to the new living conditions that arise with a fixed stock of information. On the other hand, lifelong learning suggests an understanding that preserves the continuity and regularity of the learning process. For lifelong learning, there should be versatile, enriched, innovative learning opportunities that transcend the school-teacher-student context in terms of learning, and open minds that can interact with these opportunities (Marcinkiewicz, 2020). Leona and Mayo (2021) interpreted a lack of learning as an injustice that prevents individuals from self-realization. Lifelong learning has an emancipatory character that helps an individual to solve problems. In this sense, lifelong learning is also a requirement of social justice principles.

Melting life and learning in the same pot gives an individual awareness in social, cultural, economic, political fields and in different periodical contexts. The emphasis on learning rather than teaching allows individuals to reveal their potential more creatively. For this reason, it can be said that lifelong learning promises a more enriching change process that saves individuals from the limitations of structured teaching processes (Yang, Valdés-Cotera, 2011; Lee, 2014; Boyadjieva, Trichkova, 2018). The concept of learning is a concept that centers on the attitudes and behaviors of an individual (Biesta, 2015). In this sense, positive attitudes and behaviors towards learning are important facilitators of lifelong learning (Field, 2010).

In the modern era, the biographies of individuals are less pre-structured. This transforms the allocation of an individuals' life into a creative process that causes them to show greater agency. Individuals need to struggle actively to meet the social, cultural, or economic requirements of life. On the other hand, the penetration of rapid technological changes in all areas of life and the exposure of individuals to constantly changing living conditions is another difficulty. It is possible for individuals to understand what is going on around them and improve their lives by overcoming these difficulties through new learning (Medel-Añonuevo, Ohsako, Mauch, 2001; Laal, 2011; Dirisala,

2018; Alt, Raichel, 2021). Lifelong learners are ready for change to establish a harmonious relationship with the dynamics of life (London, 2011). This allows to meet learning needs (Aroujo, 2020), strengthens learning capacity, and helps them to go beyond personal potential (Kuenkel, Gruen, 2018; Roche, 2018). According to Drewery, Sproule, and Pretti (2020), individuals who adopt lifelong learning are more curious. As a result of new learning, they can demonstrate more successful behaviors and practices. Because of its positive contributions to individuals, lifelong learning is considered a vital resource and right that should be open to everyone (Pablos, Tennyson, 2016).

Lifelong learning advises people to develop themselves and open their minds for a life with dignity and a sustainable future. When evaluated in this sense, it can be said that lifelong learning has humanistic motivations. It is important for all educational actors to make inferences about this humanist approach in order for students to develop positive attitudes towards learning life. It is only possible for individuals to functionalize lifelong learning in order to improve their own living conditions, if they recognize some ways to learn. An individual's flexibility and openness for lifelong learning depends on mechanisms that enable acquiring new knowledge, transforming existing knowledge, validating knowledge, creating, and evaluating new behavior (Unesco, 2015).

The concept of learning is a concept that centers on the attitudes and behaviors of the individual (Biesta, 2015). In this sense, positive attitudes and behaviors towards learning are important facilitators for lifelong learning (Field, 2010). These facilitators help people pursue lifelong learning opportunities (Leyretana, Trinidad, 2021). Presenting successful learning activities to students in schools plays an important role in acquiring positive attitudes and skills towards learning (Taranto & Buchanan, 2020). A students' feeling of competence in lifelong learning is accepted as an integrated ability that allows them to be ready for more socialization and personal development, as well as the knowledge, skills, and habits learned (Matvieieva et. al., 2019). Matsumoto-Royo, Ramírez-Montoya, and Conget (2021) concluded in their research that a students' lifelong learning tendencies can be increased in formal education processes.

From a developmental perspective, lifelong learning aims to reveal and develop students' interests and behaviors that will enable them to produce solutions to their needs. In order for students to be open to lifelong learning, it is important that they see themselves as competent in how to synthesize the resources found in themselves and their environment (Bangall, Hodge, 2022). A students' acquisition of learning strategies positively affects their lifelong learning attitude. Problem solving is one of these strategies (Endres, Leber, Bottger, 2021). According to Barrows (1995), in order to be able to manage the self-directed learning process, one must have the skills to define the problem and identify the learning need necessary for a solution. Problem solving skills is a strategy that people use to update themselves. Problem solving is a way of accessing new knowledge and skills (Demirel, 2009; Astuti, Suranto, Masykuri, 2019). Problem solving begins with diagnosing the problem and establishing an understanding by examining its nature. It requires setting a course for the solution and acting in this direction (OECD, 2013). In the meantime, individuals direct their feelings and knowledge, determine a problem-solving strategy, and make evaluations (Gál et. al., 2022). When

evaluated in general, problem solving is a learning approach with a wide range of application areas (Priemer et. al., 2020).

Individuals who see themselves as inadequate in problem solving may be reluctant to solve problems. This may prevent the start of new learning processes (Heppener, 2008). A critical tool in coping with difficulties and learning new things is an individual's problem-solving appraisal and seeing themselves as problem solvers (Stephanou, Oikonomou, 2018). According to Bidokhta and Assareh (2011), attitudes towards problem solving increase motivation for lifelong learning. There are strong links between problem-solving appraisal and educational/vocational issues, a wide variety of beneficial coping activities (Heppner & Lee, 2002), and using learning strategies (Heppner, Witty & Dixon, 2004). According to Heppener et al. (2019), it is important for educators to enhance students' problem-solving appraisal, because the development of problem solving self-appraisal strengthens the possibility of students to lead a more positive life. Students who do not hesitate to solve problems make an effort to create the learning that the solution requires. In this process, they manage themselves and make some strategic decisions (Skilbeck, 2012). Some researchers have shaped their studies in this direction, claiming that problem solving performance may be an important variable that predicts an individual's basic status and characteristics, such as quality of life and well-being (Soylu, Pala, 2018). In light of this, considering the predictive features of problem solving on an individual's life, investigating the effects of problem solving on lifelong learning may offer important implications toward facilitating an individuals' adoption of lifelong learning. Therefore, this study aimed to investigate the effects of problem-solving self-appraisal of high school students, who will be active members of society in the future, on their lifelong learning tendencies. In addition, the problem solving self-appraisal and lifelong learning tendencies of high school students were also examined within the scope of this research. In accordance with the purpose of the study, answers were sought to the following questions:

1. Do the lifelong learning tendencies of high school students differ according to gender?
2. Does the problem solving self-appraisal of high school students differ according to gender?
3. Is there a significant relationship between problem solving self-appraisal and lifelong learning tendency?
4. Does problem solving self-appraisal predict lifelong learning tendency?

Methods

Research Design

The research was designed according to the correlation research design, which is one of the quantitative research approaches. In the correlation design, the relations of the variables with each other and whether they predict each other can be examined (Creswell, 2019). This study aimed to investigate the effect of the problem-solving appraisal on their lifelong learning tendencies of high school students, and because it is suitable for this purpose, the correlation design was preferred.

Participants

The research population consisted of high-school students in the province of İstanbul, in the 2021–2022 academic year. Simple random sampling method was preferred to determine the study group. In simple random sampling, each element meant to be an unbiased representation of the total population has an equal chance of being selected and the unit is selected from the list until the agreed sample size is reached (Büyüköztürk et. al., 2012). The study sample consisted of 560 high school students in the province of İstanbul. Demographics of the participants are presented on Table 1.

Table 1
Demographics of the participants

Gender	*f*	%
Female	306	54.6
Male	254	45.4
Total	560	100
Grade	f	%
9	158	28.2
10	175	31.3
11	125	22.3
12	102	18.2
Total	560	100

Of all the participants 54.6% (n=306) were female, and 45,4% (n=254) were male. In addition, 28.2% (n= 158) of the participants were in the 9th grade, 31.3% (n=175) were in the 10th grade, 22.3% (n=125) were in the 11th grade, and 18.2% (n=102) were in the 12th grade.

Data Collection Procedure

In the study, data were collected with two scales. The first of the scales is the problem-solving inventory developed by Heppner and Petersen (1982). The Problem Solving Inventory is a 6-point Likert-type scale consisting of 35 items (1 = strongly agree to 6 = strongly disagree). The scale was adapted into Turkish by Şahin, Şahin and Heppner (1993). Items 9, 22 and 29 on the scale are excluded from scoring. Items 1, 2, 3, 4, 11, 13, 14, 15, 17, 21, 25, 26, 30 and 34 are reverse scored. Scale total scores range from 32 to 192. Problem solving inventory consists of three sub-dimensions: *confidence in problem-solving ability*, *approach-avoidance* and *personal control*. The Cronbach-alpha coefficients of the sub-dimensions are as follows, respectively: .922 for *problem-solving ability*; .929 for *approach-avoidance*; .789 for *personal control*; .963 and for the whole scale. High scores obtained from the scale indicate that the individual perceives himself/herself as inadequate in terms of problem-solving skills (Şahin, Şahin, & Heppner, 1993). The other scale used in the research is the Lifelong Learning Trends Scale developed by Erdoğan and Arsal (2016). The Lifelong Learning Tendency Scale is a 5-point Likert-type scale consisting of 17 items. The scale consists of *willingness to learn* and *openness to improvement* sub-dimensions and was developed to determine students' lifelong learning tendencies. The Cronbach-alpha coefficients of the sub-dimensions are as follows, respectively: .940 for *willingness to learn*; .931 for *openness to improvement* and .962 for the whole scale.

Analysis of Data

The data obtained in this research were analyzed using the Statistical Package for Social Sciences (SPSS) Windows 25.0. In addition, means, correlation and regression analyzes were used as statistical methods.

Table 2
Kurtosis and skewness values

Scale and Sub-scales	Kurtosis	Skewness
Problem solving confidence	-1.345	0.363
Approach-avoidance style	-1.324	0.364
Personal Control	-0.927	0.149
Willingness to learn	-1.000	-0.480
Openness to improvement	-1.010	-0.572

The analyzes were continued with the assumption that the variables were normally distributed. Kurtosis and Skewness values between +1.5 and -1.5 (Tabachnick & Fidell, 2013) are considered normal distribution. As the sampling is adequate according to the law of large numbers and the central limit theorem (N=560), the analyses were continued with the assumption that the distribution was normal (İnal & Günay, 1993).

Results

In the study, it was first examined whether the problem solving self-appraisal of the participants differed according to the gender variable. The independent group t-test results regarding whether problem solving appraisal differ according to gender are shown in Table 3.

Table 3
T-test results of problem-solving appraisal scores by gender

	N	X̄	Sd	t	p
1. Female	306	114.092	33.956	6.770	.000
2. Male	254	94.449	34.430		

According to Table 3; There is a significant gender difference between the problem solving self-appraisal scores of female (Female=114.092) and male (Male=94.449) students (t=6.770; p<.05).

The independent group t-test results regarding whether lifelong learning trend differ according to gender are shown in Table 4.

Table 4
T-test results of lifelong learning mean scores by gender

	N	X̄	Sd	t	p
1. Female	306	3.305	1.038	-4.534	.000
2. Male	254	3.700	.954		

According to Table 4; There is a significant gender difference between the lifelong learning mean scores of females (Female=3.305) and males (Male=3.700) students (t=-4,534; p<.05).

In the study, the relationship between students' problem solving self-appraisal scores and lifelong learning tendencies scores was examined. Pearson Correlation Analysis was applied to determine this relationship and the results are given in Table 5.

Table 5
The mean, standard deviation and correlation coefficient values of the variables

	X̄	Ss	1	2
1. Problem Solving	105.18	35.516	1	-.594[**]
2. Lifelong Learning	3,48	1.02	-.594[**]	1

Note: ** Values significant at 0.01 level

According to the data in Table 5, a significant negative correlation was found at the $p < .01$ level between the students' Problem Solving Self-appraisal scores and their lifelong learning mean scores. As the scores of the students from the Problem Solving Inventory increase, their lifelong learning tendencies decrease. A high score on the Problem Solving Inventory means that people perceive their problem solving skills to be low. Therefore, it can be said that students who perceive their problem-solving skills to be low also have low lifelong learning tendencies. The prediction level of the independent variable to dependent variable was determined with regression analysis. Table 6 shows the results of the regression analyses of the independent variable.

Table 6
Regression Analysis

Dependent Variable	Independent variables	β	t	p	F	R^2
	Constant	5.272	48.666	0.000		
Lifelong Learning	Problem Solving	-.017	-17.458	0.000	304.771	0.353

The findings provide insight into the importance of problem solving self-appraisal in lifelong learning tendencies. Table 6 shows that lifelong learning tendency was significantly predicted by problem solving self-appraisal scores (β=-.017), which accounted for 35,3% of the variance (R^2=0.353, F=304.771, p<0.00). According to the findings, the more positive the problem-solving self-assessment, the higher the lifelong learning tendency.

Discussions

Lifelong learning has been gaining more and more attention in education policies and practices. Lifelong learning encourages the individual to learn so that the individual can understand and successfully adapt to the new social, cultural, and economic conditions that arise in relation to the ongoing transformation of living conditions (Halttunen, Koivisto, Billett, 2014). It assumes that individuals are active actors in the pursuit of personal goals and needs, and recommends individuals to exhibit more personal, social, and participatory practices. Competences such as cultural awareness, mathematical, communicative, digital, and social competence are necessary for lifelong learning. In addition, these competencies must be combined with context-appropriate attitudes, knowledge, and skills, and it is important to manage the process with a constructive problem-solving approach (Leone, 2013). There are many

discourses in the literature that refer to the relationship between problem solving attitudes and skills and lifelong learning. For this reason, the study aimed to reveal experimental results about how positive self-assessment in problem solving will create a motivation on lifelong learning tendency. In this study conducted on high school students, it was first examined whether the change in the perceptions of problem solving and lifelong learning differed according to gender, and then the relationship between these two variables was aimed to be revealed.

In the literature, there are research findings in which males or females evaluate themselves more positively in problem solving. According to the findings of this study, the male students perceived themselves more positively than the female students in terms of problem solving skills. Similarly, it was concluded that the male students were more inclined toward lifelong learning than the female students. In this case, it can be said that the male students participating in the research felt more competent and insistent than the female students in solving personal and social problems and lifelong learning. The differentiation of perceptions regarding problem solving skills according to gender may have been related to the anxiety and confidence motivation of the individual, as well as to gender roles. The differences in the responsibilities imposed on the males and females according to societies may lead to changes in the types of problems and coping skills (Polat, Tümkaya, 2010; Jackson, Malcolm, Thomas, 2011). According to Galambos (2004), the concept of gender reflects the learned behaviors and attitudes that are acquired as a result of social experiences. According to Silberstang (2011), gender can also be expressed as learned behaviors, unlike sex, and life experiences related to gender can create beliefs and tendencies in individuals that will limit their lifelong learning and career orientation. Uslu and Girgin (2010) found that male university students had more problem-solving skills than female students. According to those researchers, in family life within the context of Turkish culture, female family members are under more family control and less free than male family members, and the fact that men have the opportunity to interact more in social circles beyond the family may cause them to be more skilled at problem solving. According to Preece (2011), learning preferences are not gender-specific, but they are linked to gender-related conditions that are socially constructed and highly encompassing for the individual. These conditions may cause individuals to be negatively conditioned toward learning due to their gender, to be unable to access resources sufficiently, and, thus, to be in a disadvantaged position in certain situations or societies. In educational contexts where the variable of gender produces disadvantages, teachers' support of their students by being aware of unequal social processes is a requirement for both student learning and social justice. It is important for the ideals of justice and equality that teachers be aware of the established social acceptances regarding gender and support disadvantaged students in their teaching practices (Öngel & Tabancalı, 2022). There are various studies in the literature that show that learning preferences differ or are similar to each other according to the variable of gender. As the results of the present study reveal, there may also be differences between genders in terms of learning tendencies. In such cases, it is necessary to investigate the individual and social factors that negatively affect students' learning tendencies. In this way, the design and implementation of equalizing and compensatory interventions by both teachers and education administrators can play a role in supporting students throughout their educational lives, giving individual students the motivation to develop a positive attitude toward lifelong learning and to see themselves as competent in overcoming problems, and ultimately in improving their quality of life in all developmental periods.

In the other part of the study, the relationship between lifelong learning disposition and problem solving self-appraisal was examined. According to the findings, positive self-appraisal in problem solving increases the tendency of lifelong learning. The key to understanding the relationship between problem solving and learning is to analyze the impact of the problem on one's life. The problem is the failure to meet economic, cultural, or other standards at the individual or societal levels. Or in other words, the problem is the difference between the current performance and what should be. In this case, an individual cannot create the desired results with their current vital resources (Deno, 2005). Although every problem has different aspects, the point that makes the problem a problem is not knowing how to realize its purpose and think about a solution (Novick, Bassok, 2012). In the face of this situation, problem solving is a kind of vital move that someone makes in order to improve conditions. Problem solving is a student's self-determination and decision-making role in a learning situation that does not exist but needs to be created (Skilbeck, 2012). In this process, individuals transfer and adapt their existing knowledge, integrate new knowledge into their existing knowledge, and engage with knowledge for a purpose. As a result, they learn new things (Hmelo-Silver, Kapur, Hamstra, 2018). According to Jonassen (2013), the problem solving process makes learning a goal. Problem solving, which is a strong and strategic way of thinking, is the most important facilitator of meaningful learning. It has been determined that those who perceive themselves to be competent in problem solving are more assertive in interpersonal relations, have a more positive self-perception, and exhibit more academically appropriate working methods and situations (Şahin, Heppner, 1993). In this case, it is quite possible that the lifelong learning tendencies of those who perceive themselves positively in problem solving will increase, as the research findings showed. According to Meyer (1996), the problem solving process is an internal process that can only be observed from the behavior of the problem solver and takes place in his cognitive system. The personal nature of the problem-solving process gives an individual self-efficacy for learning. In this personal process, a problem solver tries to overcome difficulties by using their individual knowledge and skills for problem-solving purposes. The individual gets involved with knowledge (Altun, 2016). In the problem solving process, a problem solver uses multiple types of knowledge, such as conceptual, procedural, beliefs, strategic, and factual knowledge (Mayer, Wittrock, 1996). Learning through problem solving has a promising character, because gaining a constructive understanding of how individuals should interact with information and how they can overcome problems contributes to their problem solving and learning in this way. These competencies, knowledge, attitudes, and skills can be developed in each individual, regardless of their personal characteristics. For example, Ginevra et al. (2015) concluded that the development of' the problem solving self-appraisal of students will affect their learning regardless of their type of personality. Motivation, determination, and self-confidence to overcome problems play a key role in sustainable learning. It is an important starting point that triggers learning that young people see themselves as competent in overcoming problems. To become lifelong learners, students must first have a proficiency perception of motivation and learning to learn (Stolk, Martello, 2015; Ng, 2016). Motivating students to be determined problem solvers at school and providing them with strategic tools can increase their lifelong learning tendencies. In this way, they can find the strength to overcome the unpredictable problems of life and improve their lives by learning.

Human beings are not able to abruptly reach their ultimate forms at any moment in life. People enter various social interactions throughout their lives and need continuous learning in order to catch up with the rapid changes in the world of the meaning of social relations. This is primarily necessary due to the problematic situations created by feelings of uneasiness, complexity, unresolvable challenges, or being left behind in the face of confusing social interactions (Jarvis, 2005; Jarvis, 2012). Facing and overcoming such problematic situations requires learning new meanings that dominate social life. In order for people to overcome the meaning incompatibilities that occur between themselves and their social lives and to start learning new meanings, they need to have self-confidence in solving the problems in their lives that are caused by not knowing those new meanings. In that way, they can be more successful in meeting the learning needs that arise throughout their lives. This is an important facilitating tool that people develop in enriching their own lives. The findings of the present study provide important support for these assessments as, according to these findings, positive self-appraisal in the realm of problem solving increases the tendency of lifelong learning. Moreover, the findings reflect the need for some adjustments to the current teaching processes in educational organizations. According to Jarvis (2006), for problem-based learning in teaching processes, students should be supported to encounter the possible problem scenarios that may be seen in real life and to solve problems. In this way, both their learning and problem-solving skills and their self-confidence can improve.

Lifelong learning symbolizes a promising understanding in improving living conditions against many global problems at the individual and social levels, from climate problems to employment insecurity (Efert, 2019). According to De Corte (2019), for a learning society that can solve problems, and thus adapt to today's technologically complex world, young generations need to be trained competently in lifelong learning. Adhering to the idea of lifelong learning enables schools to be revitalized. Schools play an important role in helping the individuals who make up a society to have the awareness, self-confidence, and motivation to meet their learning needs throughout their lives. The fact that schools adhere to the idea of learning communities and create motivation in this direction enables young people to develop beneficial relationships with society. In this way, results that benefit both parties emerge from the individual-society unity. Young people actively participate in society, meet their needs and expectations, and fulfill their responsibilities towards society (Chapman, Aspin, 2012). They also give themselves self-confidence, self-esteem, or a new identity (Jurkova, Guo, 2022). For this, students need to have an understanding to manage their learning processes. The lifelong learning tendencies of students should be supported by developing positive attitudes toward learning processes and internalizing these processes (Taranto, Buchanan, 2020). In light of the results of this research, it can be said that the learning tendencies of students who evaluate themselves negatively in the realm of problem solving are also negative. Students' lack of motivation to solve their problems or learn is an important limitation that prevents them from improving their lives. Giving them self-confidence in problem solving and helping them become lifelong learners are among the most important gains that education can provide to individuals. Developing students' self-confidence in problem solving through teaching practices, enabling them to develop positive attitudes toward learning throughout their lives, and undertaking remedial interventions to address the factors that negatively affect these variables are important recommendations for all educators as a result of this research.

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