The Level of Passion for Knowledge among High School Students while Learning Social Studies in Saudi Arabia

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Abstract

The present research paper aims to measure the level of passion for knowledge while learning social studies among high school students in Saudi Arabia. It adopts a descriptive approach. To achieve its objectives, the researcher created a scale of passion for knowledge that consists of 25 sentences. The study population covered all high school students in Jeddah, but the scale was applied to a stratified sample of 1142 students only who were selected randomly from all the public high schools in Jeddah, Saudi Arabia. The results show that the level of passion for knowledge is high as it reached 3.77. Compared with the other grades, the highest level of passion for knowledge was found for the first-grade high school students because they studied the new curricula in all stages, while those in the second and third grades studied the curriculum that was implemented before curricula were developed according to Saudi Vision 2030.

Keywords: Values, Social studies, Emotional sense of knowledge, Level of passion for knowledge.

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1. Introduction

The twenty-first century was characterized by a knowledge explosion since the production of knowledge has become rapid and there is a huge amount in all areas of life, leading to the development of curricula that have moved from the traditional curriculum to the modern one.

Among the most prominent factors that led to this development is the change resulting from scientific and technological development, which has changed many values and social concepts and led to fundamental changes in the conditions of society and ways of life (Maree & Alheela, 2015).

Human societies went through a series of transformations during which an agricultural society developed into an industrial society and then into a knowledge society as a result of the significant increase in the role of knowledge and information. The pattern of scientific and technical production shifted from the stage of individual creativity to collective production in the mid-twentieth century, which made knowledge a major engine for production, economic growth, and growing global interest in knowledge and technologies due to their impact on providing job opportunities that result in improving the productivity of society. Countries with a high economy have more cognitive potentialities (Mutawa & Al-Khalifa, 2018).

Passion is a strong desire for a specific activity that people prefer, love, and find important, and through it they occupy their efforts, energies and time on a regular basis (Vallerand, 2012).

Among the most important tendencies for learning and raising awareness is the emotional feeling that generates passion for knowledge to satisfy the instinct of innate external flair from society by knowing how to obtain knowledge and skill, or the inner passion of the self, such as reading books, and listening to and watching lectures (Cindy, 2019).

Knowledge is of great importance in the renaissance of societies. Al Maktoum (2019) highlights its importance, stating it is not true that knowledge is only power, as reality proves that knowledge today is everything for any society which aspires to a better future, a prosperous economy, and a clear path to sustainable development. First, it needs to study its situation, identify strengths and weaknesses, and explore options and opportunities; all this is provided by knowledge, which has become an urgent necessity for societies to grow and move confidently toward the future.

Passion for knowledge is a value that expresses a learner's appreciation of knowledge, perseverance in seeking, curiosity and reading, and the search for knowledge with a passion to discover and assimilate it and contribute to its production, as well as to be a means of deep understanding, reflection, and a way of life (Education and Training Evaluation Authority, 2019a).

Acquiring knowledge requires striving and effort, and this requires perseverance, encouragement, and motivation to create in one's soul a longing for knowledge, augmentation of it, and expansion of its branches, joy with every new piece of information, and enthusiasm for acquiring more of it (Ad-Daghim, 2012).

Many conferences have been held on knowledge and its importance, such as the Knowledge Summit in Dubai, which was held annually for seven years between 2014 and 2020, the Quality Education and Knowledge Access Conference in Tunisia 2020, and the Second International Conference 2020 for the Knowledge Economy, which was held virtually in Alexandria. Among the recommendations of the latter was emphasizing the importance of benefiting from successful local and international experiences in developing and evaluating future skills and strategies to be acquired by new generations.

Therefore, the Kingdom of Saudi Arabia has focused its efforts on improving its educational system and updating it according to the latest international experiences and practices in the processes of teaching, learning and evaluation to contribute to the formation of a conscious Saudi generation capable of creating knowledge, developing it, making good use of it, and dealing with future skills (Education and Training Evaluation Authority, 2019a).

The interest in developing curricula began in light of the National Standards Program for Public Education Curricula in Education and Training Evaluation Commission, established by the Saudi Cabinet decree in 2013. After the announcement of the Kingdom’s Vision 2030 in 2016, the commission has sought to achieve more than 19 of the Kingdom’s Vision goals and state them in an educational applied context.

Standards-based development is one of the latest educational trends to which education development projects have been linked, as many developed countries have adopted it to raise the level of education efficiency. Social studies standards represent one of the standards for the fields of learning in general education and define what the learner should learn and understand and can perform in the field of social studies. Social education across levels and grades aims to achieve responsible citizenship for the learner (Education and Training Evaluation Authority, 2019b).

Social studies share common general dimensions in achieving with the other fields of learning in proportion to their nature and objectives; each dimension includes a set of main and subsidiary ideas. These dimensions are curricular priorities, values, and skills, and these priorities work with values and skills according to a comprehensive system for building standards of educational curricula, applying and evaluating them by including all areas of learning in an orderly manner, and confirming their development among learners through their qualification levels for later learning, as well as increasing their abilities to solve their problems and social ones in creative ways (Education and Training Evaluation Authority, 2019a).

The values dimension consists of a set of values, including passion for knowledge. Passion for knowledge is directly included in the structure of the field of social studies by presenting facts, information, trends, values and skills that stimulate curiosity and love of learning by including its main and subsidiary ideas in light of the content of standards and their explicit performance within the criteria of the curriculum. Passion for knowledge is included indirectly in the main and subsidiary ideas of common dimensions that are taken into account when building...
examples, activities, data, statistics, drawings, pictures, projects of outstanding learners, and other learning experiences (Education and Training Evaluation Authority, 2019b).

1.1. Research Problem

Passion is a strong human emotion with underlying behavioral tendencies; it can be positive with behavioral motives, and the presence of passion is necessary for a person to reach the highest levels of performance. Psychologists who perceive passion as motivational have emphasized the hypothesis that people make a lot of effort and take a lot of time to achieve their goals with passion or to work in the activity they love (Baum & Locke, 2004).

Passion for knowledge carries with it a call to replace the traditional education systems based on standardizing, unifying, and restricting minds with other systems that exploit the tools of the age to create new horizons and transform abstract knowledge into applied knowledge whose repercussions and interactions are reflected in the individual and society. It is our duty as individuals and institutions not to be content with creating visions and making assumptions, but rather transforming them into realistic and tangible plans to enjoy a better future (Moravec et al., 2013). The studies in the literature review, such as those conducted by Crabb (2014); Gilal, Channa, Gilal, Gilal, and Shah (2019) and Khan (2020) emphasized the importance of passion in the learning process. Passion is the interest in learning new things, and it is the tendency that a person shows toward an activity in which they invest time and energy. It is an important factor in education since it not only drives teachers to teach, but also pushes students to learn efficiently (George, 2016). Like other educational processes, passion for knowledge is a continuous process, starting from early childhood and growing through it, and its means vary according to the age and inclinations of the young person. In each stage, their passion increases and extends from the university to the postgraduate stage, through knowledge acquisition and development, and keeping up with the news about it. It becomes a good habit that accompanies the successful person every day and leads to the advancement of a person in the degrees of knowledge and culture, earns them good conversation with their peers, understanding the events around them, making decisions in their affairs, and participating in the production of knowledge, authorship, and innovation in various areas of their life (Ad-Daghim, 2012).

Because of the importance of passion for knowledge as a strong emotional value, it was included as one of the values that the curricula work to develop, starting from the elementary stage and subsequently in the middle stage and then the secondary stage, to establish in students the value of appreciating science and scholars and knowledge acquisition, love of curiosity, reading and research, and the passion for knowledge discovery, assimilation, and contribution to its production through scientific research contributions. High school students studied social studies courses prior to 2020, and these courses share common dimensions with the other areas of learning, including some values, specifically passion for knowledge. With the presence of the value of passion for knowledge for the learner, the learning process becomes an emotional process that leads to the appreciation and practice of science. This is what prompted the researcher to conduct a study to determine the level of passion for knowledge among high school students while learning social studies in the Kingdom of Saudi Arabia.

1.2. Research Questions

Q1: What is the level of passion for knowledge of high school students while learning social studies in the Kingdom of Saudi Arabia?

Q2: What is the difference in the level of passion for knowledge of high school students while learning social studies in the Kingdom of Saudi Arabia according to their grade (first, second, and third)?

1.3. Research Significance

The research is significant since it highlights the importance of passion for knowledge while learning social studies. Furthermore, it gives the curriculum developers a clear vision of the effectiveness of social studies curricula in developing passion for knowledge among high school students. Moreover, other researchers can use the passion for knowledge scale developed by the researcher. In addition, the research provides access to a theoretical framework related to passion for knowledge due to the lack of relevant literature since most of the literature is in the field of psychology and business administration.

1.4. Research Objectives

1. To identify the level of passion for knowledge among high school students while learning social studies in the Kingdom of Saudi Arabia.

2. To identify the differences in the level of passion for knowledge of students in the three grades of the secondary stage.

1.5. Research Terms

Temporal Limits: The research was conducted in the first semester in October 2020.

Spatial Limits: The research was conducted in the city of Jeddah.

Human Limits: The sample was restricted to a simple random sample of high school students in the secondary first, second and third grades of the literary stream.

Substantive Limits: The research focuses on the level of passion for knowledge, which is one of the common dimensions in the field of learning social studies and other fields of learning.

1.6. Research Terms

1.6.1. Passion

Passion is a strong tendency for a specific activity; for example, one person is passionate about reading, while another is passionate about teaching. Passion has been used to denote love toward people since it is one of the levels of love (Muteqen, 2017).
1.6.2. Knowledge
Knowledge is all the facts and information obtained by an individual through their continuous theoretical and applied studies. These facts are understood and absorbed by the individual and applicable through the use of their experience (Barakati, 2019).

1.6.3. Passion for Knowledge
The specialist framework for the field of learning social studies (2019) defines passion for knowledge as a value that expresses a learner’s appreciation of knowledge, perseverance in seeking, curiosity and reading, and an eager search for knowledge to discover, assimilate, and contribute to its production to be a means of deep understanding, reflection, and a way of life. The researcher operationally defines it as follows: It is the emotional feeling of high school students while they study social studies courses at the elementary and intermediate levels, and it is a value that drives them to appreciate knowledge and perseverance in seeking it, curiosity; and the eager search for knowledge to discover it, assimilate it, and contribute to its production.

2. Literature Review
Values consist of three main components: the cognitive mental component that requires recognition of the value, realization of its meaning, and the criterion of its selection; the emotional-affective component that requires selection of value, its appreciation, pride in it, and happiness for choosing and adopting it in life, and its standard of appreciation; and the performance-behavioral component, which is the translation of value into practice and a standard of practice and an action verb (Ziadat & Qatawi, 2014).

2.1. Passion
Passion is the drive, the search for new things, and the willingness to learn. Passion simply shows a strong tendency and willingness by expending time and energy on an activity that someone loves or believes it is important. Passion is closely related to learning and is an important factor in inspiring and motivating teachers, which are key features of effective teaching (Freidus, 2010).

2.2. Qualities of the Passionate
The qualities of the passionate reported by Moravec et al. (2013) are as follows:
1. They come from all ages and categories. Passion is not the preserve of a particular group.
2. They refine their background knowledge through information collection and sharing, open communication, and in-depth experiences aimed at multiplying their abilities to generate creative ideas.
3. They practically implement and reinforce their ideas and experiences through various institutional and social channels and projects.
4. They stimulate social networks, group work, and cultural exchange to absorb the river of different cultures, societies, and civilizations.
5. They tend to use modern technological tools in solving problems, overcoming crises, and demolishing geographical and spatial boundaries.
6. They welcome the fruitful communication that is based on the exchange of experiences and information between the various categories.
7. They continuously improve their tools to adopt all that is modern and abandon old thought.
8. They excel in creating environments that reject hierarchy and support effective engagement and networking.
9. They are not afraid of failure, but rather turn failures into opportunities for learning and deepening experiences.

2.3. The Relationship between Passionate Teaching and Good Education (Serin, 2017)
- If a teacher has a high level of interest in the topic and sets a high standard on their performance, students will become more serious and more interested.
- A strong teacher–student relationship is established when there is a collaborative learning environment in the classroom.
- Students are less enthusiastic about learning if they do not know how to apply what they have learned in their lives.
- Enthusiastic teachers are always searching and striving to increase their skills that will be reflected in teaching.

2.4. Characteristics of Passion (Serin, 2017)
- Passion is not a personality trait found in some people and not found in others.
- Passion is discoverable, teachable, and replicable.
- Passion increases or decreases according to personal and social status.

2.5. Essential Characteristics of Enthusiastic Teachers (Serin, 2017)
1. Enthusiastic teachers like to work with young people and new ideas, and they do not give excuses due to students’ lack of knowledge and ability.
2. They are familiar with global affairs and social issues and reflect them effectively in teaching.
3. They are hardworking and intelligent.
4. They can tolerate senseless behaviors of students.
5. They are sensitive to the good behaviors that students should acquire.
6. They avoid criticizing ideas and seek to create mutual respect.
7. They try to create an effective learning environment where students learn on their own.
8. They take their jobs very seriously and clearly express their thoughts and beliefs.
Almut (2017) adds the following characteristics:
1. Enthusiastic teachers have deep knowledge of their course and teaching techniques, and abilities to build students' empathy.
2. They care about their students and consider them an important part of their jobs.
3. They are always thinking about their goals and beliefs and motivate their learners.
4. They can understand the people around them.
5. Effective teaching requires the use of knowledge and emotion simultaneously.
6. Enthusiastic teachers are optimistic.

2.6. The Relationship between Passion for Teaching and Effective Learning (Almut, 2017)

1. If learners see that a teacher cares about what they are doing, they take the learning process seriously. At this stage, teaching is no longer work performed by force, but becomes an inspiration for the learners.
2. Unless a learning environment of cooperation is created, respect and trust cannot be built between a teacher and learners.
3. Unless learners know how to adopt the things they learned in their real lives, their motivation to learn cannot be increased.

3. Review of the Literature
The literature review highlighted that there are very few studies on passion for knowledge. Most of the studies are in the field of psychology and business administration. Furthermore, the majority of the studies related to curricula and teaching methods are about the passion for teaching. Some of these are outlined below.

At City University of Hong Kong, Leung, Li, and Zhao (2015) incorporate a discovery-enriched curriculum to stimulate students' passion for knowledge. Their study was applied to an introductory course on programming webpages for some new students using virtual classrooms. The authors suggest developing teaching and learning activities to encourage students to discover new knowledge on their own. It was found that 75% of the students attended the course, and the results show that the students who attended more lectures obtain higher grades.

Sié and Yakhlef (2013) suggest that position positively affects the transfer of knowledge. Passion for knowledge may form a social bond that binds society together. Enthusiastic members tend to share their passion—knowledge. Information was obtained from many scientific experts in the petroleum industry in their daily work, and experts consider the transfer of knowledge an indispensable condition for them to become experts since interaction with others is an opportunity to learn and communicate with their peers. Sharing stories about their passion for knowledge, they suggest that emotional aspects (emotion, attachment, and interest) related to knowledge are factors which affect knowledge transfer.

Crabb (2014) investigates passion in university teaching by adopting the descriptive method and using interviews with and observation of six university professors who are passionate about teaching at the University of New Mexico. By using a survey of the students taught by them, the study shows that passion for teaching scored very high.

In the United States, Palmer (2017) investigates how passion is used as a teaching tool by teachers at Hugo High School using the qualitative curriculum. The sample consisted of nine teachers, some of whom used passion intentionally in the classroom, while the others used it unintentionally. The results indicate that teachers who did not plan to use passion perceive changes in their behaviors and feel good about themselves as teachers. Teachers who plan to use passion for many of their behaviors feel good about themselves as teachers when trying emotional lessons, and teachers' feelings are fueled by positive feedback from students and increase passionate teaching moments.

In Pakistan, Gilal et al. (2019) identify how passion affects positive work outcomes and can be transferred from teacher to students based on Cross’s theory and Emotional Infection theory. The sample of the study consisted of 226 pairs of teachers and students at the College of Business Administration. The results indicate that passion can be transmitted from teacher to student indirectly through emotional infection.

In Oman, Khan (2020) adopts the descriptive approach to analyze whether teachers work passionately during education outside the field and what kind of passion affects them. The research sample consisted of 241 teachers working in the higher levels of education in Oman. The results indicate that in some cases, teachers work outside the field of education with harmonious passion, and that teachers need to increase harmonious passion rather than oppressive passion.

3.1. Comments on Literature Review
- Most of the studies, including those conducted by Crabb (2014) and Palmer (2017), focused on the passion for teaching. This differs from the current research that measures passion for knowledge among students.
- Most of the studies adopted the descriptive approach except Palmer (2017) which adopted the qualitative approach, while the current research adopts the descriptive approach.
- The sample in the studies included either teachers and students, or teachers only or students only.

3.2. Research Methodology
The research adopted the descriptive approach, which is based on studying reality as it is. It accurately describes it either quantitatively or qualitatively (Saber, Mawafi, & Al-Shammari, 2015).

3.3. Research Population and Sample
The research population consists of all the high school female students in the three grades in Jeddah for the academic year 2019/2020; the total number is 49,443. A simple random sample was taken from them by using the Sample Size Calculator, which resulted in 1,142 students, as shown in Table 1.
3.4. Research Tool
The researcher utilized the passion for knowledge scale.

3.5. The Goal of the Scale
To measure the level of passion for knowledge of high school students.

3.6. Description of the Scale
The scale included instructions and directions for students on how to answer the scale, which consists of 25 statements measure that level of passion of knowledge among students.

3.7. Correction and Grading
A five-point Likert scale was used for the responses of high school students on the passion for knowledge scale. Grades were evaluated upon correcting the scale as follows: Very High (5 points), High (4 points), Medium (3 points), Low (2 points), and Very Low (1 point). The scale measures the passion for knowledge level of high school students while learning social studies in the Kingdom of Saudi Arabia according to the following standard:

- A score of 4.2 or more indicates that the level of passion for knowledge of high school students is very high.
- A score between 3.4 and 4.1 means that high school students have a high level of passion for knowledge.
- A score between 2.6 and 3.3 indicates that the level of passion for knowledge among high school students is medium.
- A score between 1.8 to less than 2.5 means that high school students have a low level of passion for knowledge.
- A score less than 1.8 indicates that high school students have a very low level of passion for knowledge.

3.8. Psychometric Characteristics
The validity of the scale was verified using apparent validity and internal consistency validity.

3.9. Face Validity
The validity of the scale was verified by presenting it to a group of experienced and specialized arbitrators, including education experts, for them to express their opinion and comment on the suitability of the scale statements for the purpose of research.

Based on the opinions of the arbitrators about the suitability of the tool to achieve the research objectives, and according to their observations and suggestions, some statements were modified, and some were added or deleted, which resulted in the inclusion of 25 statements, and the scale was in its final form.

3.10. Internal Consistency Validity
The researcher performed the verification of the statements by determining the internal consistency of the scale statements (the research tool) by calculating the Pearson correlation coefficients between each of the sentences in the tool and the total point of the scale to which they belong for each of the scale sentences and the total score, as shown in the Table 2 below.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>374</td>
<td>32.8</td>
</tr>
<tr>
<td>Second</td>
<td>385</td>
<td>33.7</td>
</tr>
<tr>
<td>Third</td>
<td>383</td>
<td>33.4</td>
</tr>
<tr>
<td>Total</td>
<td>1142</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table-2. Correlation coefficients between each statement of the scale and the total points of the scale.

<table>
<thead>
<tr>
<th>No.</th>
<th>R.</th>
<th>No.</th>
<th>R.</th>
<th>No.</th>
<th>R.</th>
<th>No.</th>
<th>R.</th>
<th>R.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.56**</td>
<td>6</td>
<td>0.57**</td>
<td>11</td>
<td>0.51**</td>
<td>16</td>
<td>0.46**</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>0.63**</td>
<td>7</td>
<td>0.54**</td>
<td>12</td>
<td>0.59**</td>
<td>17</td>
<td>0.65**</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>0.46**</td>
<td>8</td>
<td>0.51**</td>
<td>13</td>
<td>0.46**</td>
<td>18</td>
<td>0.56**</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>0.65**</td>
<td>9</td>
<td>0.67**</td>
<td>14</td>
<td>0.55**</td>
<td>19</td>
<td>0.59**</td>
<td>24</td>
</tr>
<tr>
<td>5</td>
<td>0.50**</td>
<td>10</td>
<td>0.54**</td>
<td>15</td>
<td>0.57**</td>
<td>20</td>
<td>0.62**</td>
<td>25</td>
</tr>
</tbody>
</table>

Note:
** Significant at level $\alpha \leq 0.01$
R: Correlation coefficient.

The table above shows that all the correlation coefficients represent a function at the level of $\alpha \geq 0.01$, which indicates a high degree of consistency of the scale. The results of the table suggest that all values are statistically significant at the level of (0.01) because the correlation coefficients between each item and the total score ranged (0.46–0.67), indicating the internal consistency of the scale. Regarding the reviewer's validity, the scale was presented to some specialists to review their opinions and modify it in accordance to make it applicable.

3.11. Reliability
The scale was applied to a pilot sample of 30 female students in the secondary third grade at The Sixty-Five School in Jeddah. To calculate its reliability coefficient, Cronbach’s alpha ($\alpha$) was used, and the value of the scale reliability coefficient was $\alpha = 0.88$, which indicates a high degree of reliability.
3.12. Procedures

The research was conducted online during the COVID-19 pandemic via the electronic platform “Madrasti” (My School), which is used in all the academic stages. This facilitated sending the scale link during virtual classes according to the following procedures:
1. An official letter was sent from the College of Education to the Educational Administration to allow the researcher to apply the research tool.
2. The supervisor of social studies teachers sent an official letter to the teachers asking them to facilitate the application of the research scale in cooperation with the researcher.
3. The researcher provided female teachers with the scale link, which was electronically designed on Microsoft Forms.
4. The research tool was applied to the pilot sample consisting of 30 female students in the third secondary grade (the link was distributed during the virtual class) to verify the validity and reliability of the tool on September 29th, 2020.
5. On October 12th, 2020, the tool was applied by female teachers who distributed the scale link after the end of the lesson and showed students how to respond to it.
6. After ensuring that the sample met the required number, an Excel file of the electronic scale was uploaded to be statistically processed to generate the research results, recommendations, and suggestions.

4. Analysis and Discussion

To answer the first research question, “What is the level of passion for knowledge of high school students while learning social studies in the Kingdom of Saudi Arabia?” the frequencies, percentages, and arithmetic mean of the responses of high school students in the Kingdom of Saudi Arabia were calculated to measure their level of passion for knowledge. These are shown in Table 3.

Table 3 shows the following results:
• In general, the level of passion for knowledge of high school students while learning social studies in the Kingdom of Saudi Arabia is high, with a mean score of 3.77.
• The level of passion for knowledge of high school students while learning social studies in the Kingdom of Saudi Arabia in relation to “I love to participate in scientific workshops and competitions” was very high, with a mean score of 4.48. This was followed by “I follow the Digital Knowledge Center with great interest,” which was very high, with a mean score of 4.44.
• The level of passion for knowledge was low or medium among high school students while learning social studies in the Kingdom of Saudi Arabia in relation to the following statements:
  • “Scholars deserve to be honored with national and international awards,” with a mean score of 2.60.
  • “I enthusiastically follow the Hackathon news locally or internationally,” with a mean score of 2.65.
  • “I search Google for what I don’t know,” with a mean score of 2.94.
  • “I follow current events and news related to the latest inventions,” with a mean score of 2.98.

To answer the second research question, “What is the difference between the passion for knowledge level of high school students while learning social studies in the Kingdom of Saudi Arabia according to the academic grade (first, second, and third)?”, the following hypothesis was tested: “There are no statistically significant differences at the \( \alpha \leq 0.05 \) significance level between the means of the responses of high school students while learning social studies in the Kingdom of Saudi Arabia in the passion for knowledge scale according to the grade (first, second, third).” To verify the validity of this hypothesis, one-way analysis of variance (ANOVA) was used to calculate the value of \( q \) to indicate the differences between the means of the responses of high school students while learning social studies in the Kingdom of Saudi Arabia in the measurement of passion for knowledge according to the difference in the academic grade (first, second, third). Table 4 and Table 5 explain these results.

Table 4 and Table 5 show the following results:
• There are statistically significant differences at the \( \alpha = 0.05 \) level between the means of the responses of high school students while learning social studies in the Kingdom of Saudi Arabia in the passion for knowledge scale according to the grade (first, second, and third) based on the presence of significant differences in the ANOVA test.
• Scheffé’s test was used to assess the significance of differences, and the results are shown in Table 6.
• The differences between the levels of passion for knowledge of high school students during learning social studies in Saudi Arabia regarding grades (first, second, and third) were in favor for the responses of high school first-grade students with a higher arithmetic mean.
I am not afraid of failure. I turn failures into opportunities for learning and deepening my Curiosity.

I have a great deal of curiosity and enthusiasm for many events.

I am making a major contribution to life through my abilities and talents.

Scholars deserve to be honored with national and international awards.

I follow current events and news related to the latest inventions.

Scientists have a role in our progress and well-being.

The level of passion for knowledge among high school students while learning social studies in high schools in the Kingdom of Saudi Arabia.

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements that measure passion for knowledge</th>
<th>Very High</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>Very Low</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Ranking</th>
<th>Passion Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scientists have a role in our progress and well-being.</td>
<td>564</td>
<td>49.7</td>
<td>365</td>
<td>32.0</td>
<td>179</td>
<td>15.7</td>
<td>22</td>
<td>1.9</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Human civilizations have a role in the accumulation of knowledge and the advancement of life.</td>
<td>492</td>
<td>43.1</td>
<td>426</td>
<td>37.3</td>
<td>185</td>
<td>16.2</td>
<td>30</td>
<td>2.6</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Social studies subjects conveyed to us the efforts made by geospatial disclosures to know the new world.</td>
<td>367</td>
<td>32.1</td>
<td>422</td>
<td>37.0</td>
<td>283</td>
<td>24.8</td>
<td>35</td>
<td>3.1</td>
<td>33</td>
</tr>
<tr>
<td>4</td>
<td>I love the traveler stories that I studied in my social studies course.</td>
<td>286</td>
<td>25.0</td>
<td>209</td>
<td>18.3</td>
<td>380</td>
<td>34.2</td>
<td>156</td>
<td>13.7</td>
<td>101</td>
</tr>
<tr>
<td>5</td>
<td>I follow current events and news related to the latest inventions.</td>
<td>161</td>
<td>14.1</td>
<td>155</td>
<td>13.6</td>
<td>462</td>
<td>40.5</td>
<td>230</td>
<td>20.1</td>
<td>134</td>
</tr>
<tr>
<td>6</td>
<td>I appreciate the achievements of geographers and historians, and I hope to be like them.</td>
<td>271</td>
<td>23.7</td>
<td>257</td>
<td>22.5</td>
<td>316</td>
<td>27.7</td>
<td>175</td>
<td>15.3</td>
<td>123</td>
</tr>
<tr>
<td>7</td>
<td>I follow the contributions of my compatriots in inventions.</td>
<td>308</td>
<td>27.0</td>
<td>234</td>
<td>20.5</td>
<td>355</td>
<td>31.1</td>
<td>147</td>
<td>12.9</td>
<td>98</td>
</tr>
<tr>
<td>8</td>
<td>I work to achieve my goals through my love of science and knowledge.</td>
<td>625</td>
<td>54.7</td>
<td>311</td>
<td>27.2</td>
<td>156</td>
<td>13.7</td>
<td>33</td>
<td>2.9</td>
<td>17</td>
</tr>
<tr>
<td>9</td>
<td>I like to visit research, scientific and technology centers.</td>
<td>327</td>
<td>28.6</td>
<td>231</td>
<td>20.2</td>
<td>318</td>
<td>27.8</td>
<td>142</td>
<td>12.5</td>
<td>123</td>
</tr>
<tr>
<td>10</td>
<td>I enthusiastically follow the Hackathon news locally or internationally.</td>
<td>160</td>
<td>14.0</td>
<td>139</td>
<td>12.2</td>
<td>294</td>
<td>25.7</td>
<td>240</td>
<td>21.0</td>
<td>306</td>
</tr>
<tr>
<td>11</td>
<td>Scholars deserve to be honored with national and international awards.</td>
<td>138</td>
<td>12.1</td>
<td>125</td>
<td>10.9</td>
<td>318</td>
<td>27.8</td>
<td>267</td>
<td>23.4</td>
<td>294</td>
</tr>
<tr>
<td>12</td>
<td>I like to participate in workshops and scientific competitions.</td>
<td>737</td>
<td>64.5</td>
<td>269</td>
<td>23.6</td>
<td>91</td>
<td>8.0</td>
<td>35</td>
<td>3.1</td>
<td>10</td>
</tr>
<tr>
<td>13</td>
<td>I have great awareness of my beliefs and ideas that enable me to excel and be creative.</td>
<td>284</td>
<td>24.9</td>
<td>258</td>
<td>22.0</td>
<td>352</td>
<td>29.3</td>
<td>164</td>
<td>14.4</td>
<td>101</td>
</tr>
<tr>
<td>14</td>
<td>My current activities and practices help me immensely to develop myself.</td>
<td>382</td>
<td>31.6</td>
<td>361</td>
<td>31.6</td>
<td>170</td>
<td>15.3</td>
<td>18</td>
<td>1.6</td>
<td>6</td>
</tr>
<tr>
<td>15</td>
<td>I am making a major contribution to life through my abilities and talents.</td>
<td>580</td>
<td>50.8</td>
<td>339</td>
<td>29.7</td>
<td>170</td>
<td>14.9</td>
<td>38</td>
<td>3.3</td>
<td>15</td>
</tr>
<tr>
<td>16</td>
<td>I love learning about the cultures of different societies and civilizations.</td>
<td>508</td>
<td>43.5</td>
<td>314</td>
<td>27.5</td>
<td>237</td>
<td>20.8</td>
<td>60</td>
<td>5.4</td>
<td>23</td>
</tr>
<tr>
<td>17</td>
<td>I am enthusiastic about knowing everything new about science and its development.</td>
<td>580</td>
<td>50.8</td>
<td>263</td>
<td>23.0</td>
<td>254</td>
<td>20.5</td>
<td>39</td>
<td>3.4</td>
<td>26</td>
</tr>
<tr>
<td>18</td>
<td>I have a great deal of curiosity and curiosity about many events.</td>
<td>500</td>
<td>43.8</td>
<td>302</td>
<td>26.4</td>
<td>248</td>
<td>21.7</td>
<td>73</td>
<td>6.4</td>
<td>19</td>
</tr>
<tr>
<td>19</td>
<td>I feel a lot of enthusiasm when linking causal relationships in historical events.</td>
<td>541</td>
<td>47.4</td>
<td>263</td>
<td>23.8</td>
<td>204</td>
<td>23.1</td>
<td>56</td>
<td>4.9</td>
<td>18</td>
</tr>
<tr>
<td>20</td>
<td>I like to use modern technologies that make life easier and save time.</td>
<td>335</td>
<td>31.1</td>
<td>319</td>
<td>19.5</td>
<td>347</td>
<td>30.4</td>
<td>146</td>
<td>12.8</td>
<td>73</td>
</tr>
<tr>
<td>21</td>
<td>I am not afraid of failure. I turn failures into opportunities for learning and deepening experiences.</td>
<td>619</td>
<td>57.9</td>
<td>256</td>
<td>22.4</td>
<td>170</td>
<td>14.9</td>
<td>32</td>
<td>2.8</td>
<td>23</td>
</tr>
<tr>
<td>22</td>
<td>I possess an abundance of information on a variety of topics.</td>
<td>442</td>
<td>38.7</td>
<td>347</td>
<td>30.4</td>
<td>242</td>
<td>21.2</td>
<td>77</td>
<td>6.7</td>
<td>34</td>
</tr>
<tr>
<td>23</td>
<td>I make time every day to read the books I love.</td>
<td>250</td>
<td>21.9</td>
<td>310</td>
<td>27.9</td>
<td>384</td>
<td>42.4</td>
<td>77</td>
<td>6.7</td>
<td>21</td>
</tr>
<tr>
<td>24</td>
<td>I search Google for what I don’t know.</td>
<td>224</td>
<td>19.6</td>
<td>154</td>
<td>13.5</td>
<td>310</td>
<td>27.2</td>
<td>223</td>
<td>19.5</td>
<td>225</td>
</tr>
<tr>
<td>25</td>
<td>I follow the Digital Knowledge Centre with great interest.</td>
<td>767</td>
<td>67.2</td>
<td>193</td>
<td>16.9</td>
<td>123</td>
<td>10.8</td>
<td>39</td>
<td>3.4</td>
<td>20</td>
</tr>
</tbody>
</table>

| Total | 3.77 | High |

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Table 4. Mean of high school students’ responses to determine their level of passion for knowledge according to the difference in the grade.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>374</td>
<td>374</td>
<td>First</td>
</tr>
<tr>
<td>Second</td>
<td>385</td>
<td>385</td>
<td>Second</td>
</tr>
<tr>
<td>Third</td>
<td>383</td>
<td>383</td>
<td>Third</td>
</tr>
<tr>
<td>Total</td>
<td>1142</td>
<td>1142</td>
<td>Total</td>
</tr>
</tbody>
</table>

Table 5. The results of the one-way ANOVA test to indicate the differences between the means of the responses of high school students to determine their level of passion for knowledge according to the difference in the grade.

<table>
<thead>
<tr>
<th>Between Groups</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>76.870</td>
<td>15</td>
<td>5.125</td>
<td>0.666</td>
<td>0.410</td>
</tr>
<tr>
<td>Within Groups</td>
<td>595.880</td>
<td>84</td>
<td>7.094</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>676.750</td>
<td>99</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 6. The results of Scheffé’s test to identify the differences in the level of passion for knowledge among high school students.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Mean</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>36.45</td>
<td>-</td>
<td>2.96*</td>
<td>3.92*</td>
</tr>
<tr>
<td>Second</td>
<td>39.89</td>
<td>-2.96*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Third</td>
<td>32.53</td>
<td>-3.92*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>36.45</td>
<td>-</td>
<td>2.96*</td>
<td>3.92*</td>
</tr>
</tbody>
</table>

Note: * Significant at the α=0.05 level.

5. Discussion

This study found that the level of passion for knowledge among high school students was high, with a mean of 3.77. This confirms (Serin, 2017) statement that passion for knowledge is discoverable, learnable, and can be recurrent. Passion for knowledge appeared to be at a high level with regard to following the Digital Information Center and participating in workshops and scientific competitions. This is confirmed by Sié and Yakhlef (2013), who state that passion for knowledge affects knowledge transfer. The researcher attributes this to the fact that that high school students are constantly logging onto the Internet, which allows them to follow the news of the Digital Information Center and cultural competitions since they are greatly highlighted by media. Measuring the differences between the three grades of the secondary stage shows that the level of passion for knowledge among students in the first secondary grade was higher than that of those in the other grades. The researcher attributes this to the fact that female students in the first secondary grade studied the new curricula in all stages, while those in the second and third grades studied the curriculum that was implemented before curricula were developed according to Vision 2030.

6. Recommendations

The following recommendations have been made in light of the research results. Workshops and seminars should be held to introduce the value of passion for knowledge and explain its importance in the learning process. Furthermore, attention should be paid to passion for knowledge while learning social studies, especially with regard to knowledge production through scientific and research contributions. Moreover, the passion for knowledge scale should be applied to students of the intermediate and university stages to determine their level of passion for knowledge.

7. Further Research

The researcher proposes that further studies should be conducted in light of the research results. First, the content of social studies curricula should be analyzed to identify the level of passion for knowledge. Second, the relationship between passion for knowledge and the emotional passion of male and female students should be studied. Finally, the level of passion for knowledge of university students should be determined.

8. Conclusion

Passion for knowledge is the value that motivates a learner to learn and read from childhood onward. If attention has been paid to develop it as an emotional value during academic stages, this will lead to having more knowledge and utilizing new knowledge through various scientific and research contributions. The level of passion for knowledge among secondary stage female students is attributed to the inclusion of the matrix of passion for knowledge value in curricula of social studies in all the academic stages. This is in line with one of the goals of the Kingdom’s Vision 2030, which is to establish a knowledge society in which information and knowledge occupy an advanced position coupled with more scientific and creative discoveries and the accumulation of knowledge.

References

Barakat, M. (2010). The concept of knowledge, its characteristics and importance.


