

Designing a Health Education Scale for Secondary School Students

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Research Introduction:

The ultimate goal of health education is to improve health at the individual and societal levels, reduce the incidence of disease, reduce disability and mortality, and improve the quality of life for both individuals and society. This means educating individuals to change their behavior and habits that contribute to the spread of disease within society and instilling social customs and traditions that support and develop health, such as exercising. The issue of awareness and successful development of this awareness among individuals is closely related to shaping an important aspect of an individual's personality. Therefore, this issue must receive planned and deliberate attention, just as does the formal educational process at any academic level. (10: 20)

Baha'a El-Din Ibrahim (2007) states that health education is the provision of health information, data and facts that link health to disease to all citizens. It may seem to some that health education means something like imposing a matter on people, forgetting that its primary goal is guidance and direction, and that its goal is to reach a state in which every individual becomes psychologically and emotionally prepared to respond to health instructions.

It Is worth mentioning here to clarify the difference between a healthy habit and a healthy practice. A habit is something that an individual does without thinking or feeling as a result of frequent repetition, while a healthy practice is what an individual does intentionally, stemming from his adherence to certain values. Here, sound healthy practices can turn into a habit that is performed unconsciously as a result of frequent repetition. These healthy practices are the family's responsibility to turn into habits, and the formation of habits begins from a health perspective, and this clarifies the important role that the family plays in the field of improving and caring for health.(6 : 22)

Baha'a El-Din Ibrahim (2001) adds that health culture means providing information, data and health facts related to health and disease to all citizens. (5: 22)

Suleiman Ali (2000) states that the concept of health culture means familiarity with knowledge, information, data and statistics related to health and health education.(9 : 27)

Ahmed Ibrahim (1999) points out that health culture is one of the most important pillars of the health care issue due to the continuous scientific and technological development in the health field during the current century, and the change in the form, system and health requirements of society accordingly. Health culture, in turn, has a profound impact on the individual's personality and behavior, as it forms the lifestyle and natural behavior is an aspect of culture to improve health and prevent health problems. Culture also helps to increase health knowledge and improve people's ability to make the necessary decisions and procedures to solve their problems.(1 : 22)

It is the knowledge of health information, data and facts that are related to health and disease, but the individual may not use them in his life or benefit from them. Therefore, they remain a healthy density without affecting the individual's life and behaviour. (2:43)

The secondary stage is particularly important in acquiring knowledge, different cultures, and scientific principles that crystallize, diversify, and branch out in the university education stage. Therefore, it is necessary to increase attention to this stage, by preparing its educational curricula well according to sound scientific foundations for the development and advancement of students. (12:36)

The secondary stage corresponds to the adolescent stage, and students at this stage tend to take care of themselves, and the level of health improves in general, and maturity and control of different abilities increases, and lack of symmetry may appear between different parts of the body as a result of the growth spurt, and the concept of the body greatly affects the psychological health of students at this stage, which makes them interested in health culture and sports, especially those that are very popular among their peers, especially if this student enjoys good health and physical fitness. At this age, there may be a tendency to eat voraciously, which subsequently leads to obesity in some students. (15: 105).

Research Problem:

From the above, the researcher found that there is a problem: physical education is a basic subject, lacking qualified cultural health programs. Furthermore, the curricula lack appropriate health information and knowledge for the secondary stage. These curricula do not align with the interests and desires of the sample under study, nor do they develop their attitudes toward engaging in activities that positively impact their athletic and health well-being. Furthermore, attention to student health has become a necessity in the educational process. Therefore, attention must be paid to students, preparing them, and qualifying them through the use of diverse activities. This enables them to continuously develop health awareness. It is also necessary to develop purposeful plans and programs, as physical education does not have the educational and scientific importance of other subjects, such as mathematics, biology, chemistry, history, geography, and philosophy. Therefore, we must focus on physical education as a basic subject, with its own educational and scientific importance, and elevate its status among other subjects to achieve the desired benefits for secondary school students.

The researcher noted deficiencies in the health education measures provided to secondary school students in providing them with health and

sports awareness, leading to a low level of health and sports education among the sample under study. Furthermore, the researcher rarely uses various technological methods and tools to serve educational programs within secondary schools, as secondary school is considered one of the most important age groups requiring exercise and health education to avoid many modern viruses and various health problems.

Through the researcher's review of scientific references that addressed the development of health education measures, to the best of her knowledge, there has been no study addressing the design of health education measures for secondary school students. This prompted the researcher to conduct this study.

The importance and need for the research:

The current research gains its importance from the following:

A-Scientific importance:

The scientific importance of this research lies in its attempt to identify how to design health education scales for secondary school students, to guide students and researchers in this field.

B-Applied importance:

The applied importance of this research lies in the design of health education scales for secondary school students, including (sports, health, and nutritional culture, physique health, environmental health, and community health, etc.), to raise the level of health education among students at this stage. Health education plays an important role in the health and well-being of secondary school students and in their physical performance. The health education curriculum is of utmost importance to secondary school students, who constitute a large community encompassing an important stage of education, and the emphasis placed on sound health practices as behavioral tools.

Research objective:

The research aims to design a health education scale for secondary school students.

Research terms:

- Curriculum:

Maher Sabry (2014) states that health education is one of the interconnected processes that seeks to eliminate incorrect ideas and

behaviors related to individuals' health and change them for the better. Health education is also considered one of the processes that provide members of societies with the necessary expertise related to individual health (13: 119)

Previous studies:

-A study conducted by **"Ahmed Rateb"** (2008 AD) (3), entitled **"The impact of a health education program using some audio-visual aids on the health aspects of mentally disabled students capable of learning in the Red Sea Governorate."** The study aimed to design a proposed health education program for students in the first cycle of basic education for mentally disabled students capable of learning, the research sample. The researcher used the experimental method on a sample of (10) students. The researcher selected the research sample intentionally. The most important results were that the proposed program has a positive impact on developing the health culture of mentally disabled students in the first cycle of basic education in Ras Ghaleb City, and on the importance of audio-visual aids in attracting attention and conveying information easily and smoothly, and on the importance of physical education in developing health culture and acquiring healthy health habits and avoiding incorrect ones, and its close connection to the general health of the individual.

-A study conducted by **"Amani Matar"** (2010 AD) (4) entitled **"The impact of a health education program to raise the level of school health for female students in the first stage of basic education."** The study aimed to build a proposed health education program to raise the level of school health for female students in the first stage of basic education and to identify its impact on school health for female students in the first stage of basic education. The researcher used the experimental method on a sample of (150) female students, whose ages ranged between (11:12) years. The most important results were that it was possible to build a school health program for students in the first stage of basic education and that the proposed health education program had a positive impact on raising the level of school health for sample members.

-A study conducted by **"Suzan Baraka"** (2010 AD) (11), entitled **"The Physical Education Curriculum and its Impact on Acquiring Healthy Behavior for Second Cycle Basic Education Students"**, the study aimed to find out the availability of healthy

behavior in the content of the physical education curriculum, and the extent of the contribution of the physical education teacher during teaching in acquiring healthy behavior for second cycle basic education students, and the researcher used the descriptive approach with the survey method on a deliberate sample of female students in the preparatory stage in Kafr El-Sheikh Education Administration, amounting to (192) female students, as well as physical education teachers in the current cycle of basic education in the Kafr El-Sheikh Education Sector in Kafr El-Sheikh Education Administration in Kafr El-Sheikh Governorate, and the most important results were that the physical education curricula did not include direct health objectives, and that physical education teachers did not contribute significantly and directly to acquiring healthy behavior for second cycle basic education students .

-A study conducted by both **"Ziad Al-Jarjawi"** and **"Muhammad Agha"** (2011 AD) (8), entitled **"The Reality of Applying Health Education in Government Schools in Gaza City"**, and the study aimed to identify the reality of applying health education in government schools in Gaza City. The researchers used the descriptive analytical approach in the study, on a simple random sample of (129) individuals from (50) schools in Gaza City from health education supervisors, and the data collection tools consisted of applying a questionnaire prepared by them. The most important results of the research were that the school carefully monitors the health environment, and that the school has a role in providing health care services to students and teachers in addition to its role in health education for students. The results showed that the school cares about the psychological health of students and that the school applies health education. The researchers recommended the necessity of activating the role of the teacher in the field of school health by holding special courses for him on this subject and paying attention to participation between students, teachers and administrators in the school and working in a team spirit.

-A study conducted by **"Hazem Salah Abdel-Mawla"** and **"Ahmed Salah El-Suwaifi"** (2020) (7), entitled **"A proposed plan for health and environmental awareness using motor activities for pre-school children in Minya City"**, and the study aimed at a proposed plan for health and environmental awareness using motor activities for pre-school children in Minya City, and used the

descriptive approach in the survey method, and used the sample in the intentional way on faculty members, the sample consists of (15) members (30) supervisors and kindergarten teachers, data collection tools on the personal interview form and experience survey forms about the proposed plan, and the results reached the proposed plan for health and environmental awareness using motor activities has a statistically significant positive impact on the kindergarten stage, the most important recommendations are the necessity of addressing the departments of curricula and teaching methods and sports health sciences in the faculties of physical education to teach the proposed plan for health and environmental awareness using motor activities for pre-school children in Minya City.

Search procedures:

-Research Methodology:

The researchers used the descriptive approach using a survey method, which is not limited to description but extends to include analysis and interpretation, as it is appropriate for achieving the research objective.

-Research Community and Sample:

The research community comprised faculty members at colleges of physical education, specializing in health sciences and sports psychology, physical education supervisors and teachers, and secondary school students (the research sample). The researcher also selected a random sample of (100) individuals as a primary sample and (30) individuals as a exploratory sample from outside the primary research sample. The following table describes the research sample.

Table (1)
Description of the research sample

| A | M category | Sample search |
|---|--|--|
| | - Faculty members in some faculties of sports sciences, male and female teachers, physical education supervisors, male and female, in the Samalut Education Administration, and secondary school students (100) individuals as the research sample | (100) individuals for the research sample. (30) individuals for the exploratory sample. |

Data Collection Tools:

To collect the research data, the researcher relied on a set of data collection tools, including:

1-Document and Record Analysis:

The researcher analyzed the documents and records by reviewing the health education scales for the secondary stage. She found significant gaps in the coverage of health topics, which prompted the researcher to develop a health education scale for the secondary stage.

2:Personal Interview

The researcher conducted several personal interviews using a designed interview form to survey the opinions of the research sample, which included faculty members in the Colleges of Sports Sciences specializing in curricula, teaching methods, and sports health sciences, as well as physical education supervisors and teachers. The aim was to identify the themes and phrases of the health education scale for the secondary stage (Appendix 3).

Health Literacy Scale for the Research Sample (Annex 7):

Steps for Developing the Scale:

To design the scale under study, the researcher followed the following steps:

- 1 .Determine the purpose of the scale.
2. Determine and formulate the scale's axes.
- 3 .Prepare the scale in its initial form:
 - Formulate the statements in their initial form.
 - Determine the appropriate correction key for the scale.
 - Prepare the scale instructions.
 - Determine the survey sample.
- 4 .Prepare the scale in its initial form:
 - Determine the scale duration.
 - Validity.
 - Reliability.
- 5 .Prepare the scale in its final form:
 - Determine the correction key.
 - Instructions.

The researcher followed the following steps in preparing the questionnaire:

Defining the purpose of the questionnaire, which is to identify the axes of the health literacy scale for the research sample.

A reference survey was conducted of some scientific references and previous studies that dealt with health literacy, such as the study of "**Hani Ali Muhammad**" (2014) (14) **Hazem Salah Abdel-Mawla** and "**Ahmed Salah Al-Suwaifi**" (2020) (7) in order to determine the axes of the health

literacy scale for the research sample. The researcher arrived at (6) axes, which are shown in Table No. (38)

Table(2)
Health education scale axes

| | Axes |
|----------|---|
| 1 | public health |
| 2 | Consistency |
| 3 | .First aid |
| 4 | and environmental health |
| 5 | Smoking and addiction |
| 6 | Infectious diseases and immunity |

(1)The researcher prepared an expert opinion poll form for the scale's axes (attachment 3) and presented it to a group of experts in sports health sciences whose experience in the field exceeds (10) years (attachment 1) in order to express an opinion on the extent of the suitability of the axes or not to the research topic and the scale design by approval, deletion, modification, rephrasing, or adding other axes to the scale. The researcher accepted a percentage of 70% or more to accept the extracted axes, and the following tables clarify this:

Table (3)
Percentage of experts' opinions on the health literacy scale axes (n = 11)

It is clear from Table (3) that the percentage of experts' opinions on

| | Axes | The eXpert s opinion | | |
|----------|---|-----------------------------|-----------------|------------------------|
| | | Agree | Disagree | Approval rate % |
| 1 | public health | 13 | 2 | %86.7 |
| 2 | Consistency | 15 | – | 100 |
| 3 | .First aid | 15 | – | 100 |
| 4 | and environmental health | 13 | 2 | %86.7 |
| 5 | Smoking and addiction | 13 | 2 | %86.7 |
| 6 | Infectious diseases and immunity | 15 | – | 100 |

the suitability of the axes of the health education scale under study ranged between (86.7%: 100%). The axes that obtained a percentage of 70% or more of the total experts' opinions were chosen, and in light of that, all the axes of the health education scale were chosen.

Formulating the phrases of the health education scale in its initial form:

(1)The researcher then formulated the phrases for the health education scale, using the axes extracted from the opinions of experts, which measure those axes. When formulating the phrases for the health education scale, the researcher took care to ensure that the phrases were easy, simple, and understandable. Thus, the health education scale was developed in its initial form (Appendix 6). The number of these phrases reached (74).

(2) The health literacy scale was presented to the experts (Annex 1) to obtain their opinions on the following:

- The suitability of the axes to the study title.
- The adequacy of the statements for each axis, which explain the axes of the questionnaire.
- The relative importance of each axis.
- The suitability of the statement to measure the axis for which it was developed.
- The deletion, combination, rephrasing, or addition of other statements to the axis.

(3)When presenting the health literacy scale to the experts, the researcher used the following options: (Agree – Disagree).

(4)When correcting the health literacy scale, the researcher used the following options: (Always (3) – Sometimes (2) – Never (1)), which are statements in the direction of the axis. Note that there are statements in the opposite direction of the axis, which are responded to as (Always (1) – Sometimes (2) – Never (3)).

B- Scientific parameters of the scale:

(1)Validity:

To calculate the validity of the scale, the researcher used the following:

- Content validity.
- Hypothetical construct validity, calculated by internal consistency validity.

•Content Validity: The researcher presented the health education scale, which contains (6) axes under which (74) statements are included, to some experts from the faculty members of the departments of sports health sciences in the faculties of sports sciences, consisting of (15) experts (Appendix 1). This was to express their opinion on the suitability of the health education scale for what it was designed for, whether in terms of the axes and statements specific to each axis, and the extent to which these statements are appropriate for the axis they represent. They were asked to express their opinion on this by placing a check mark (in front of the statement and under the word “agree” if the statement is appropriate, under “disagree” if the statement is not appropriate for the axis it represents, and under the word “modify” if the statement needs to be modified in its wording. The statements that received a percentage of 70.00% or more from the group of experts’ opinions were selected. In light of this, the wording of some statements was modified, and no statement was excluded. Thus, the number of statements of the health education scale in its final form reached (74) statements. The following table (40) shows the percentage of experts’ opinions on the scale’s statements.

Table(4)
Percentage of expert opinions on health education scale statements for
secondary school students(n =15)

| Axis | Phrase numbers, frequency, and frequency percentage | | | | | | | | | | | |
|-----------------|---|------|------|------|------|------|------|------|------|------|------|------|
| First axis | phrase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | repetition | 14 | 15 | 15 | 15 | 14 | 15 | 14 | 14 | 15 | 15 | 14 |
| | ratio | %93 | %100 | %100 | %100 | %93 | %100 | %93 | %93 | %100 | %100 | %93 |
| | phrase | 12 | 13 | 14 | 15 | | | | | | | |
| | repetition | 15 | 14 | 13 | 13 | | | | | | | |
| | ratio | %100 | %93 | %87 | %87 | | | | | | | |
| The second axis | phrase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | repetition | 15 | 14 | 13 | 14 | 14 | 15 | 14 | 12 | 13 | 14 | 13 |
| | ratio | %100 | %93 | %87 | %93 | %93 | %100 | %93 | %80 | %87 | %93 | %87 |
| The third axis | phrase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | repetition | 15 | 14 | 15 | 13 | 14 | 15 | 13 | 15 | 14 | 15 | 13 |
| | ratio | %100 | %93 | %100 | %87 | %93 | %100 | %87 | %100 | %93 | %100 | %87 |
| The fourth axis | phrase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | repetition | 14 | 15 | 14 | 15 | 13 | 14 | 15 | 13 | 15 | 14 | 15 |
| | ratio | %93 | %100 | %93 | %100 | %87 | %93 | %100 | %87 | %100 | %93 | %100 |
| | phrase | 12 | 13 | 14 | | | | | | | | |
| | repetition | 13 | 14 | 15 | | | | | | | | |
| Fifth axis | ratio | %87 | %93 | %100 | | | | | | | | |
| | phrase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | repetition | 13 | 14 | 13 | 14 | 15 | 15 | 14 | 13 | 14 | 14 | 15 |
| | ratio | %87 | %93 | %87 | %93 | %100 | %100 | %93 | %87 | %93 | %93 | %100 |
| | phrase | 12 | 13 | | | | | | | | | |
| Six axis | repetition | 15 | 15 | | | | | | | | | |
| | ratio | %100 | %100 | | | | | | | | | |
| | phrase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| | repetition | 13 | 14 | 13 | 14 | 12 | 13 | 14 | 15 | 15 | 14 | |
| | ratio | %87 | %93 | %87 | %93 | %80 | %87 | %93 | %100 | %100 | %93 | |

Table (4) shows that the percentage of experts' opinions on the health literacy scale ranged between 80.00% and 100%, indicating the relevance of the statements to the axis to which they belong.

•Hypothetical construction validity by calculating the validity of (internal consistency):

The researcher used the validity of the hypothetical construction by calculating the validity of (internal consistency). The questionnaire was administered to a survey sample of (30) individuals from the research

community and outside the primary research sample. Correlation coefficients were calculated between the score of each statement and the total score of the health literacy scale, correlation coefficients between the score of each statement and the total score of the axis to which it belongs, and correlation coefficients between the total scores of each axis and the total score of the health literacy scale. The following tables illustrate the results, respectively.

Table (5)

Correlation coefficients between the score of each item on the health literacy scale for secondary school students and the total score for the axis to which it belongs (n = 30)

| Scale axes | Phrases | | | | | | | |
|-----------------|-------------------------|------|------|------|------|------|------|------|
| First axis | Phrase number | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Correlation coefficient | 0.46 | 0.60 | 0.67 | 0.75 | 0.79 | 0.81 | 0.71 |
| | Phrase number | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| | Correlation coefficient | 0.67 | 0.58 | 0.74 | 0.78 | 0.77 | 0.59 | 0.74 |
| | Phrase number | 15 | | | | | | |
| | Correlation coefficient | 0.74 | | | | | | |
| The second axis | Phrase number | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Correlation coefficient | 0.68 | 0.73 | 0.78 | 0.77 | 0.79 | 0.81 | 0.71 |
| | Phrase number | 8 | 9 | 10 | 11 | | | |
| | Correlation coefficient | 0.67 | 0.58 | 0.74 | 0.78 | | | |
| The third axis | Phrase number | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Correlation coefficient | 0.77 | 0.59 | 0.68 | 0.73 | 0.78 | 0.77 | 0.68 |
| | Phrase number | 8 | 9 | 10 | 11 | | | |
| | Correlation coefficient | 0.68 | 0.73 | 0.78 | 0.77 | | | |
| The fourth axis | Phrase number | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Correlation coefficient | 0.73 | 0.79 | 0.46 | 0.60 | 0.67 | 0.75 | 0.79 |
| | Phrase number | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| | Correlation coefficient | 0.77 | 0.73 | 0.78 | 0.77 | 0.68 | 0.77 | |
| Fifth axis | Phrase number | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Correlation coefficient | 0.73 | 0.77 | 0.73 | 0.78 | 0.77 | 0.59 | 0.73 |
| | Phrase number | 8 | 9 | 10 | 11 | 12 | 13 | |
| | Correlation coefficient | 0.73 | 0.78 | 0.73 | 0.78 | 0.77 | 0.68 | |
| Six axis | Phrase number | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Correlation coefficient | 0.59 | 0.73 | 0.78 | 0.77 | 0.59 | 0.73 | 0.78 |
| | Phrase number | 8 | 9 | 10 | | | | |
| | Correlation coefficient | 0.73 | 0.78 | 0.77 | | | | |

The tabular value of α at a degree of freedom of (28) and a significance level of (0.05) = 0.362

.Table (5) shows the following:

-The correlation coefficients between the score of each statement of the health education scale axis and the total score of the axis ranged between (0.46: 0.81), and these are statistically significant correlation coefficients at a significance level of 0.05, which indicates that the axis has an appropriate degree of validity.

Table (6)

Correlation coefficients between the total scores of each axis of the health education scale for secondary school students (n=30)

| Questionnaire axes | Number of phrases | Correlation coefficients |
|----------------------------------|-------------------|--------------------------|
| public health | 15 | 0.98 |
| Consistency | 11 | 0.90 |
| .First aid | 11 | 0.90 |
| and environmental health | 14 | 0.96 |
| Smoking and addiction | 13 | 0.95 |
| Infectious diseases and immunity | 10 | 0.89 |

The tabular value of α at a significance level of (0.05) = 0.312

Table (6) shows the following:

-The correlation coefficients between the total scores of each axis of the health education scale for secondary school students and its total score ranged between (0.89: 0.98). These are statistically significant correlation coefficients at a significance level of 0.05, indicating that the scale has an appropriate degree of validity.

(2)Reliability:

To calculate the reliability of the scale, the researcher used the split-half method (Cronbach's alpha coefficient) by applying it to a survey sample of (10) families from the research community and outside the primary research sample. The following table (13) shows the results.

Table (7)

Reliability coefficient of the health education scale for secondary school students using Cronbach's alpha coefficients (n = 30)

| Questionnaire axes | Number of phrases | Cronbach's alpha coefficients |
|----------------------------------|-------------------|-------------------------------|
| public health | 15 | 0.90 |
| Consistency | 11 | 0.74 |
| .First aid | 11 | 0.82 |
| and environmental health | 14 | 0.90 |
| Smoking and addiction | 13 | 0.90 |
| Infectious diseases and immunity | 10 | 0.74 |

The tabular value of (r) at a significance level of (0.05) = 0.312

Table (7) shows the following:

The alpha coefficients for the health education scale axes ranged between (0.74: 0.90), which are statistically significant correlation coefficients at a significance level of 0.05, indicating that the health education scale has an appropriate degree of stability.

Research Steps:

Exploratory Study:

The researcher conducted an exploratory study of the data collection tool, applying it to a sample from the research community and from outside the primary sample, from October 12, 2024 to October 27, 2024. The purpose was to determine its suitability and relevance to the application to that sample.

Research Application:

The researcher administered the final form of the health literacy scale to the sample members, from November 5, 2024 to December 10, 2024. She followed the following steps:

- 1-The researcher distributed the health literacy scale to the sample.
- 2- The content of the health literacy scale was explained to the sample, clarifying its purpose and the method of answering it.
- 3-Any ambiguity was explained and clarified.
- 4- The researcher ensured that the name was optional, and that the information provided in the questionnaire was confidential and would be used only to achieve the research objectives.

Correcting the health literacy scale questionnaires:

After completing the application, the researcher corrected the questionnaires according to the instructions provided above. After completing the correction process, the scores were recorded in preparation for statistical processing.

Statistical Methods Used:

The researcher processed the data for the research results statistically using the SPSS v26 statistical program and the following statistical parameters:

- Percentage.
- Correlation coefficient.
- Cronbach's alpha coefficient.
- Estimated score.
- Arithmetic mean.
- Frequencies.
- T-test for significance of differences.

Conclusions and Recommendations**First: Conclusions:**

Within the limits of the research problem and its importance, in light of its objectives and hypotheses, the nature of the sample, and within the framework of statistical processing, interpretation, and discussion of the results, the researchers were able to reach the following conclusions:

1-The health literacy scale is a valid and reliable tool with direct significance and benefit from both research and practical perspectives.

2-The health education scale was extracted in its final form, including (6) axes as follows:

(1)**The first axis:** Public health: It includes (15) statements among the students under study.

(2)**The second axis:** Body composition: It includes (11) statements among the students under study.

(3)**The third axis:** First aid: It includes (11) statements among the students under study.

(4)**The fourth axis:** Personal and environmental health: It includes (14) statements among the students under study.

(5)**The fifth axis:** Smoking and addiction: It includes (13) statements among the students under study.

(6) **The sixth axis:** Infectious diseases and immunity: It includes (10) statements among the students under study.

Second: Recommendations

In light of the research results, the researchers recommend the following:

- 1- The need to focus on applying the health education scale to students.
- 2- Attention should be paid to designing a health education scale for other samples.

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Designing a health education scale for secondary school students

The research aims to design a health education scale for high school students. The researchers used the descriptive curriculum in the method of survey studies, which is not limited to the description, but extends to include analysis and interpretation, for its suitability to achieve the research goal and represent the research community in faculty members in the colleges of physical education specializing in health sciences and sports psychology, faculty and physical education teachers and high school students, the research sample, and the researcher chose a random sample (100) One of the basic sample and (30) individuals as an exploratory sample and outside the basic research sample and the following table shows the description of the research sample. The most important results indicated that the health education scale is honest and fixed, and it has a significance and direct benefit in both in the research and applied point of view. The researchers recommend the need to pay attention to applying the health education measure to students. And attention to the design of the health education scale in other samples.