

EFFECTIVENESS OF A PROGRAM BASED ON THE USE OF ELECTRONIC STORIES TO DEVELOP HEALTH AWARENESS AMONG KINDERGARTEN CHILDREN

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Abstract

The current study aims to identify the effectiveness of a program based on the use of electronic stories in developing health awareness among kindergarten children. A quasi-experimental design was used, and the study was conducted on (50) boys and girls enrolled in government kindergartens in Najran. The following instruments were used in the study: a pictorial health awareness test (personal hygiene, physical health, healthy food, prevention and safety) for kindergarten children. A study conducted on the effectiveness of an e-stories program for developing health awareness among kindergarten children in Najran, conducted by their mothers, yielded the following results: Statistically significant differences ($p < 0.05$) were found between the pre- and post-test mean scores of the study sample regarding children's awareness of personal hygiene; physical health; healthy eating; and prevention and safety. Based on these findings, the researchers recommended the use of e-stories to enhance health concepts in kindergarten children and to make the learning process more enjoyable and engaging.

Keywords: e-stories, health awareness, kindergarten child

INTRODUCTION:

During this stage, kindergarten children undergo numerous changes in various aspects of their development, making the development of health concepts even more crucial. When a child is healthy, their play and activity levels increase, and their creativity and talents emerge, fostering well-rounded citizens capable of contributing to their community and fulfilling their responsibilities to their country (Mansi, 2021). Attention to developing health concepts in kindergarten has a significant impact on a child's physical, social, emotional, and cognitive well-being throughout childhood (Pippi et al., 2020). A study by Brandt (2016) indicated that one of the goals of health awareness for kindergarten children is to instill a desire to maintain and enjoy personal hygiene as an end in itself to ensure physical health. This involves encouraging children to practice necessary healthy behaviors and habits through activities and situations. A study by Kobel et al. (2017) highlighted the importance of promoting health in kindergartens through a program titled "Join the Healthy Boat." After implementing the program, children in the control group showed improved physical performance and a better understanding of healthy behaviors. Alderman (2015) also points out that one of the reasons for focusing on developing health concepts in kindergarten children is the prevalence of many malnutrition-related diseases among children, such as anemia, obesity, severe underweight, and diabetes. Indeed, every country in the world suffers from at least one form of childhood malnutrition.

In light of scientific advancements and in response to the technological progress that has swept through all fields, especially children's education, many electronic stories have emerged. These stories, programmed onto CDs, feature both audio and visual elements, making the learning process more engaging and exciting for children.

Studies and research have indicated that the use of digital education increases the efficiency of the educational process because it provides a more suitable environment for learners of varying intellectual and age levels and learning stages. Furthermore, it contributes to raising the level of student achievement, enhancing classroom interaction, and making the learning experience more realistic and applicable, thus transforming education into a continuous process. (Al-Taf, 2019)

The kindergarten teacher plays a significant role in shaping a child's personality. Children acquire positive habits and attitudes towards various health concepts and topics from her. She also plays a crucial role in guiding and advising children appropriately when they encounter health problems. This means that the kindergarten teacher's role is not limited to providing affection and care for the child in the absence of their mother, but extends to becoming a role model for the child to emulate in their healthy behaviors. She must also utilize all available elements in the child's environment to develop their abilities and interests (Al-Maliji, 2021). From the above, the importance of developing health awareness in kindergarten children using electronic stories becomes clear.

The Problem of the Study:

Several reasons motivated researchers to investigate the development of health concepts in kindergarten children. Through our work as supervisors of early childhood students in practical education, we observed behaviors indicating a low level of children's awareness of the health concepts necessary to protect them from health risks and problems. This was compounded by teachers' reliance on traditional methods and approaches to developing these concepts. Furthermore, a review of previous studies addressing the development of health concepts in kindergarten children and the use of electronic stories confirmed that most of them emphasized the low level of health awareness in kindergartens due to the use of traditional methods. This negatively impacted the children's understanding of health concepts. The studies by Al-Maliji (2021) and Nassar et al. (2019) confirm that one of the most significant reasons for the ineffectiveness of kindergarten programs in health awareness is the use of traditional methods and rote learning techniques to develop health concepts in kindergarten children. The World Health Organization (WHO) (2020) recommended health awareness in all aspects of life, which helps reduce the incidence of emerging diseases (<http://www.who.int>).

Numerous studies have also recommended developing health concepts in kindergarten children and instilling appropriate health behaviors and attitudes. These studies have employed diverse approaches and mechanisms, all aimed at developing health concepts in kindergarten children, such as the studies by Ahmed (2019), El-Shafei (2019), Taha and Bastawisi (2019), Abdel-Momen (2017), El-Meligy (2021), Mansi et al. (2021), and Nassar et al. (2019).

The results of the study by Pippi et al. (2020) also recommended the necessity of promoting health awareness among kindergarten children. Dias, Maria J.A (2020) study highlighted the necessity of health literacy from childhood to old age, as did Al-Tatari (2016) study, which confirmed the effectiveness of e-stories in developing reading comprehension skills. Based on the above, e-stories have been used to develop health awareness among kindergarten children.

Research Questions:

What is the effectiveness of a program based on the use of electronic stories in developing health awareness among kindergarten children?

The following questions branch out from this:

- Are there statistically significant differences at the (0.05) level between the mean scores of the study sample in the pre- and post-tests of children's awareness of personal hygiene attributable to the use of a program based on electronic stories?
- Are there statistically significant differences at the (0.05) level between the mean scores of the study sample in the pre- and post-tests of children's awareness of physical health attributable to the use of a program based on electronic stories?
- Are there statistically significant differences at the (0.05) level between the mean scores of the study sample in the pre- and post-tests of children's awareness of healthy eating attributable to the use of a program based on electronic stories?
- Are there statistically significant differences at the (0.05) level between the mean scores of the study sample in the pre- and post-tests of children's awareness of prevention and safety attributable to the use of a program based on electronic stories?

The current study adopted a quasi-experimental approach using a single-group experimental design to measure the effectiveness of electronic stories in developing health awareness among kindergarten children. This was achieved through pre- and post-testing, comparing the results of the two tests, and measuring the statistical significance of the differences between them.

Study Limitations

Spatial Limitations: The study was conducted with kindergarten children enrolled in a government-run kindergarten affiliated with the Early Childhood Education Department in Najran.

Personal Limitations: The study sample consisted of kindergarten children enrolled in a government-run kindergarten affiliated with the Early Childhood Education Department in Najran.

Temporal Limitations: The study was conducted during the first semester of the academic year 1447 AH.

Thematic Limitations: The study examined the use of electronic stories in developing health awareness (personal hygiene, physical health, healthy nutrition, and prevention and safety) among kindergarten children.

Research Sample

The study sample consists of a random sample of 50 kindergarten children enrolled in a government kindergarten affiliated with the Early Childhood Education Department in Najran.

Study Terminology:

Electronic Stories

These are defined as a collection of written stories presented on an electronic medium through the addition of technologies related to sound, images, color, animation, and musical effects. These stories are based on facts, events, plot, characters, dramatic arc, and conflict, and have a time and place. They aim to educate, enlighten, entertain, and amuse (Al-Fawzan, 2019, p. 252).

Operationally, it is defined as a collection of written stories created on an electronic medium by adding technologies related to sound, images, color, animation, and musical effects to develop health awareness (personal hygiene, physical health, healthy food, prevention, and safety) in kindergarten children.

Health Awareness

It is defined as the ability of an individual, their family, and their local community to access, understand, and utilize information in ways that promote and maintain good health (World Health Organization, 2020). It is also defined as a state of physical and mental well-being and sufficiency, not merely the absence of disease, disability, or deformities (Scrivens 2017, p. 4).

Operationally, it is defined as the kindergarten child's familiarity with health knowledge and information, the formation of positive attitudes towards healthy behaviors, and encouraging them to maintain their health and accustom them to practicing sound health behaviors (personal hygiene, physical health, healthy food, prevention, and safety).

Research Tools and Materials:

Research Tools:

A pictorial health awareness test for kindergarten children, which includes the following sections: (personal hygiene, physical health, Healthy Food - Prevention and Safety). The scale was constructed according to the following steps: Defining the test objective: This test was designed to determine the effectiveness of using e-stories in developing health awareness among kindergarten children. The researchers relied on the following sources to construct the test: research and studies that addressed early childhood development, its philosophies, e-stories, and health awareness. The test consists of four main sections: the first section is personal hygiene, consisting of (10) statements; the second section is physical health, consisting of (10) statements; the third section is healthy food, consisting of (10) statements; and the fourth section is prevention and safety, consisting of (10) statements. The total number of statements across the four sections is 40. Children answer by circling the appropriate answer. The test is scored as follows: if the child chooses the correct answer, they receive (1), and if they choose the incorrect answer, they receive zero. The total score for the test is 40. The test instructions are formulated for the children before beginning, explaining the concept of the test in the simplest possible terms, how to answer its questions, and providing an example of how to answer the test questions.

To ensure the validity of the initial version of the test, the researchers confirmed the validity of the initial version of the scale by calculating the psychometric properties of the scale and its items, through: calculating the validity and reliability of the study instrument (the pictorial health awareness test for kindergarten children, which includes the following axes: personal hygiene, physical health, healthy food, prevention and safety).

Face validity (arbitrator validity):

The researchers confirmed the face validity of the test by presenting it to a group of (11) expert arbitrators with specialization and experience in the field of study; This was done to evaluate the test after reviewing the study's title, questions, and objectives. The reviewers were asked to provide their opinions and observations on the suitability of the test items for measuring health awareness among kindergarten children in Najran, specifically regarding: the appropriateness of the statements to the study's focus, the accuracy of the linguistic formulation of the statements, and the suitability of the images. The wording of some statements and images was modified based on the reviewers' feedback. □ Results of Internal Consistency Validity of the Scale

To verify internal consistency validity, the correlation coefficients between the scores of each scale statement and the total scores for the dimension to which the statement belongs were calculated. The results are shown in Table (1):

Table (1): Shows the correlation coefficients between the scores of each scale statement and the total scores for the dimension to which the statement belongs.

Personal hygiene		Physical health		Healthy diet		Prevention and safety	
N	Correlation coefficient	N	Correlation coefficient	N	Correlation coefficient	N	Correlation coefficient
1	0.513**	11	0.631**	21	0.613**	31	0.643**
2	0.582**	12	0.601**	22	0.564**	32	0.447**

3	0.625**	13	0.571**	23	0.61**	33	0.442**
4	0.602**	14	0.677**	24	0.871**	34	0.692**
5	0.718**	15	0.634**	25	0.845**	35	0.737**
6	0.701**	16	0.601**	26	0.613**	36	0.576**
7	0.56**	17	0.43**	27	0.558**	37	0.52**
8	0.582**	18	0.549**	28	0.608**	38	0.496**
9	0.742**	19	0.621**	29	0.871**	39	0.577**
10	0.542**	20	0.589**	30	0.842**	40	0.634**

Table (1) shows the correlation coefficients between the scores of each scale item and the total scores for the dimension to which the item belongs. These coefficients ranged from (0.430 – 0.871), and all were statistically significant at the (0.01) level. Therefore, the scale items are considered valid for what they were designed to measure.

Results of the Scale's Construct Validity: To verify the scale's construct validity, correlation coefficients were calculated between the total scores for each dimension and the total scale scores. The results are shown in Table (2):

Table (2): Shows the correlation coefficients between the total scores for each dimension and the total scale scores.

Aspects	Correlation coefficient
Personal hygiene	0.712**
Physical health	0.803**
Healthy diet	0.806**
Prevention and safety	0.748**

Table (2) shows the correlation coefficients between the total scores for each dimension and the total scale scores. The coefficients for each dimension ranged from (0.70 – 0.82), and all were statistically significant at the (0.01) level, indicating the validity and homogeneity of the scale dimensions.

Scale and Dimension Reliability Results

The reliability of the scale and its dimensions was verified using both Cronbach's alpha coefficient and the split-half method. The results are shown in Table (3).

Table (3): Reliability Coefficients for the Scale and its Dimensions

Half splitting		Cronbach's alpha coefficient	N	Aspects
Spearman-Brown	Getman			
0.793	0.794	0.819	10	Personal hygiene
0.778	0.778	0.851	10	Physical health
0.951	0.951	0.867	10	Healthy diet
0.841	0.842	0.815	10	Prevention and safety
0.880	0.881	0.910	40	Total grade

Table (3) shows the reliability coefficients for the scale and its dimensions. Using Cronbach's alpha, the reliability coefficients for the individual dimensions ranged from (0.815 to 0.867), with a total reliability coefficient of (0.91). Using Spearman-Brown, the reliability coefficients for the individual dimensions ranged from (0.778 to 0.951), with a total reliability coefficient of (0.881). Using Gittmann's method, the reliability coefficients for the individual dimensions also ranged from (0.778 to 0.951), with a total reliability coefficient of (0.880). These are acceptable reliability rates, which reassure researchers about the results of the scale's application. The discriminatory power of the scale's items is also discussed.

The results of the Mann-Whitney U test, comparing the mean scores of the high-scoring group and the children's group on the health awareness scale, showed that the Z-values ranged between 2.56 and 4.12, all of which were statistically significant. This indicates statistically significant differences between the high-scoring and low-scoring groups on all items of the scale, suggesting that the ability...

Study Materials:

Second: The Effectiveness of a Program Based on the Use of Electronic Stories to Develop Health Awareness Among Kindergarten Children in Najran City

The program was implemented on the experimental group consisting of 50 boys and girls enrolled in kindergartens.

The program aims to identify the effectiveness of a program based on the use of electronic stories to develop health awareness among children. The researchers relied on the following sources: research and studies that addressed early childhood and its philosophies, as well as studies that addressed electronic

stories and health awareness, research and studies that addressed how to prepare a program for children, and research and studies that addressed how to prepare a program A guidance program for mothers, lasting 6 weeks, with 3 days per week and two sessions per day, from 15/3/1447 to 26/4/1447.

Program Content:

The program consists of a series of sessions designed to develop health awareness among kindergarten children in Najran. The researchers developed the program, comprising 36 sessions covering topics such as personal hygiene, physical health, healthy nutrition, and prevention and safety. The program was implemented with 50 kindergarten children. The researchers employed various strategies and assessment methods, including pre-assessment, formative assessment, and post-assessment.

Program Validity:

The program was reviewed by 11 experts in the relevant field to gather their feedback on the activities, their suitability for the age group, and their alignment with the program's objectives. Based on the experts' feedback, the necessary modifications were made. Thus, the program was finalized and ready for application to the study sample.

The practical procedures for implementing the study included the following:

After completing the pre-test of the study instrument, the researchers implemented the program from March 15, 1447 AH to April 26, 1447 AH with the experimental group. The program lasted for six weeks, with three sessions per week, and two sessions per day.

Study Procedures:

- Reviewing previous studies related to the research topic to prepare the theoretical framework, literature review, and research instruments.
- Developing the research instrument, a pictorial health awareness test for kindergarten children, after consulting with specialists and a language editor to ensure its suitability, correct wording, validity, and reliability.
- Contacting the Early Childhood Education Department to facilitate the researchers' application of the study instruments and materials to kindergarten children.
- Selecting a pilot sample of 30 children to administer the test and confirm its validity and reliability.
- Administering the test to the main sample of 50 kindergarten children in Najran.
- Developing a program based on electronic stories to enhance health awareness among kindergarten children. This program was implemented with the study sample.
- After completing the program with the study sample, the pictorial health awareness test was administered to assess the level of health awareness among the kindergarten children.
- Tabulating and coding the data in the SPSS statistical analysis program in preparation for analysis.
- Statistical analysis of the data to answer the research questions.
- Interpretation and discussion of the results, and writing recommendations and suggestions.

Statistical methods used:

The researchers used the Statistical Package for the Social Sciences (SPSS 25) to conduct the statistical analyses.

The following statistical methods were used:

- 1- Pearson correlation coefficient to measure internal consistency and construct validity.
- 2- Cronbach's alpha coefficient and split-half method to measure the reliability of the scale.
- 3- Arithmetic mean and standard deviation.
- 4- Mann-Whitney U test to measure the discriminatory power of the scale items (extreme comparison).
- 5- Paired-samples t-test to measure the significance of differences between the pre-test and post-test.
- 6- Black's adjusted gain ratio equation to measure effectiveness.

Answering the Study Questions

Answering the Main Research Question:

The main question states, "What is the effectiveness of using electronic stories in developing health awareness among kindergarten children in Najran?"

To answer the main question, the paired-samples t-test and Black's adjusted gain ratio equation were used, which set the value (1.2) to assess effectiveness. The results are shown in Table (4):

Table (4): Significance of the differences between the mean scores of the kindergarten children in the research sample in the pre- and post-tests of the health awareness scale.

Measure	M	St-dev	T test			Max grade	Gain
			T	df	α		
Pre-test	15.98	2.00	52.41	49	0.001	40	1.25
Post-test	34.76	2.14					

Table (4) shows the results of the t-test for the significance of the differences between the mean scores of the kindergarten children in the research sample in the pre- and post-tests of the health awareness scale. The mean score of the kindergarten children in the research sample was (49.33) in the pre-test and

(79.65) in the post-test. The t-value was (52.41) and the significance level was (0.001), indicating a statistically significant difference between the two measurements in favor of the post-test. The adjusted gain ratio was (1.25), which is greater than (1.2), indicating that the program based on the use of electronic stories, which the researchers used, was effective and led to the development of health awareness among the kindergarten children. The results of this study are consistent with the study by Abdel-Moneim (2017), which concluded that using digital stories has a positive impact on developing health concepts in preschool children, and the study by Mansi, Muslim, and Fikri (2021), which concluded that an electronic program is effective in developing health literacy among kindergarten children. The study by Al-Shinawi (2018) concluded that digital stories have an impact on developing health concepts in kindergarten children. The researchers attribute these results to the suitability of the electronic stories presented to children for the dimensions of health awareness, the diversity of the electronic stories offered, the stories' appeal due to their inclusion of sound, visuals, movement, and music, and the variety of assessment methods used.

Answer to the first sub-question of the research:

The first sub-question states: "Are there statistically significant differences at the significance level (≤ 0.05) between the mean scores of the kindergarten children in the research sample in the pre- and post-tests of children's awareness of personal hygiene, attributable to the use of electronic stories?"

To answer this question, the paired samples t-test and Black's adjusted gain ratio equation were used, which set the value (1.2) to judge effectiveness. The results are shown in Table (5):

Table (5): Significance of the differences between the mean scores of the kindergarten children in the research sample in the pre- and post-tests of children's awareness of personal hygiene.

Measure	M	St-dev	T test			Max grade	Gain
			T	df	α		
Pre-test	4.00	0.99	29.92	49	0.001	10	1.21
Post-test	8.54	1.20					

Table (5) shows the results of the t-test for the significance of the differences between the mean scores of the kindergarten children in the research sample in the pre- and post-tests of the child's awareness of the concept of personal hygiene. The mean score of the kindergarten children in the research sample was (4.0) in the pre-test and (8.54) in the post-test. The t-value was (29.92) and the significance level was (0.001), which indicates that there are statistically significant differences between the two measurements in favor of the post-test. The adjusted gain ratio was (1.21), which is a value greater than (1.2). This indicates that the program based on the use of electronic stories, which the researchers used, was effective and led to raising the level of awareness of the concept of personal hygiene among the kindergarten children. The result of the study was consistent with the study of Aql (2012), which indicated that the learner interacts with the educational content through the virtual museum. This helps in their better understanding of personal health concepts, such as personal hygiene, cleanliness of appearance and clothing. Hussein (2020) confirmed that the virtual museum contributes to teaching children about proper eating habits, washing hands before and after eating, and proper drinking habits. Suric's (2014) study confirmed the effectiveness of electronic social storytelling using multimedia in improving socially acceptable behaviors and reducing behavioral problems among children in the experimental group. The researchers attribute these results to the suitability of the electronic stories presented to children regarding personal hygiene, the diversity of the electronic stories, the stories' appeal due to their inclusion of sound, visuals, movement, and music, and the variety of assessment methods used.

Answer to the second sub-question of the research:

The second sub-question states: "Are there statistically significant differences at the significance level (≤ 0.05) between the mean scores of the kindergarten children in the research sample in the pre- and post-tests of the child's awareness of physical health, attributable to the use of electronic stories?" To answer this question, the paired samples t-test and Black's adjusted gain ratio equation were used, which set the value (1.2) to judge effectiveness. The results were shown in Table (6):

Table (6): Significance of differences between the mean scores of the kindergarten children in the research sample in the pre- and post-measurements of the child's awareness of physical health.

Measure	M	St-dev	T test			Max grade	Gain
			T	df	α		
Pre-test	4.02	0.91	24.55	49	0.001	10	1.23
Post-test	8.62	1.09					

Table (6) shows the results of the t-test for the significance of the differences between the mean scores of the kindergarten children in the research sample in the pre- and post-tests of children's awareness of physical health. The mean score of the kindergarten children in the research sample was (4.02) in the

pre-test and (8.62) in the post-test. The t-value was (24.55) and the significance level was (0.001), indicating a statistically significant difference between the two measurements in favor of the post-test. The adjusted gain ratio was (1.23), which is greater than (1.2), indicating that the program based on the use of electronic stories, which the researchers used, was effective and led to raising the level of physical health awareness among the kindergarten children. The results of the study are consistent with the studies of Ali (2021), Aql (2020), and Mustafa (2017) on the positive impact of using electronic action stories on children in modifying their behavior. The study by Shahbo (2019) confirmed the impact of e-stories on improving self-concept among kindergarten children. The researchers recommended expanding the use of e-stories as an approach to developing various aspects of child development. They attributed these results to the suitability of the e-stories for children in relation to physical health, the diversity of the e-stories offered, and their appeal due to the inclusion of sound, visuals, movement, and music.

Answer to the third sub-question of the research:

The third sub-question states: "Are there statistically significant differences at the significance level (≤ 0.05) between the mean scores of the kindergarten children in the research sample in the pre- and post-tests of children's awareness of healthy eating, attributable to the use of e-stories?" To answer this question, a paired-samples t-test and Black's adjusted gain ratio equation were used, which set the value (1.2) for judging effectiveness. The results are shown in Table (7):

Table (7): Significance of differences between the mean scores of the kindergarten children in the research sample in the pre- and post-tests of the child's awareness of healthy food.

Measure	M	St-dev	T test			Max grade	Gain
			T	df	α		
Pre-test	3.98	0.91	36.65	49	0.001	10	1.29
Post-test	8.82	0.92					

Table (7) shows the results of the t-test for the significance of the differences between the mean scores of the kindergarten children in the research sample in the pre- and post-tests of children's awareness of healthy food. The mean score of the kindergarten children in the research sample was (3.98) in the pre-test and (8.82) in the post-test. The t-value was (36.65) and the significance level was (0.001), indicating a statistically significant difference between the two measurements in favor of the post-test. The adjusted gain ratio was (1.29), which is greater than (1.2), indicating that the program based on the use of electronic stories, which the researchers used, was effective and led to raising the level of awareness of healthy food among kindergarten children. The results of the study are consistent with the study by Piziak (2012) on the effectiveness of educational games in raising nutritional awareness among children in early childhood, and by Shaaban, Youssef (2018), which confirmed the effectiveness of using storytelling and electronic activities in imparting nutritional knowledge to kindergarten children. The researchers attribute these results to the suitability of the electronic stories presented to children in relation to healthy eating, the diversity of the electronic stories offered, and the stories' appeal due to their inclusion of sound, visuals, movement, and music related to healthy eating.

Answer to the fourth sub-question of the research:

The third sub-question states: "Are there statistically significant differences at the significance level (≤ 0.05) between the mean scores of the kindergarten children in the research sample in the pre- and post-tests of children's awareness of prevention and safety, attributable to the use of electronic stories?" To answer this question, the paired samples t-test and Black's adjusted gain ratio equation were used, which set the value (1.2) to judge effectiveness. The results are shown in Table (8):

Table (8): Significance of the differences between the mean scores of the kindergarten children in the research sample in the pre- and post-tests of children's awareness of the concept of prevention and safety.

Measure	M	St-dev	T test			Max grade	Gain
			T	df	α		
Pre-test	3.98	0.96	30.17	49	0.001	10	1.28
Post-test	8.78	0.95					

Table (8) shows the results of the t-test for the significance of the differences between the mean scores of the kindergarten children in the research sample in the pre- and post-tests of the child's awareness of the concept of prevention and safety. The mean score of the kindergarten children in the research sample was (3.98) in the pre-test and (8.78) in the post-test. The t-value was (30.17) and the significance level was (0.001), which indicates that there are statistically significant differences between the two measurements in favor of the post-test. The adjusted gain ratio was (1.28), which is greater than (1.2). This indicates that the program based on the use of electronic stories, which the researchers used, was effective and led to raising the level of awareness of the concept of prevention and safety among kindergarten children. The result of the study is consistent with the study by Al-Hamrawi and Al-Naklawi (2021), which confirmed that the use of a virtual museum based on interactive stories contributed to

developing the concept of security and safety for kindergarten children. Al-Touni's 2019 study found that virtual museums offer opportunities to experience things that might be difficult to experience in the real world, either due to the inherent risks or the potential dangers. The researchers attribute these findings to the suitability of the electronic stories presented to children, their focus on safety and prevention, the diversity of these stories, their appeal through the inclusion of sound, visuals, movement, and music, and the assessment methods employed.

Recommendations:

Based on the study's findings and theoretical framework, the following recommendations can be made:

- The importance of utilizing electronic stories to develop health concepts in kindergarten children and making the learning process more enjoyable and engaging.
- Conducting workshops and training sessions for kindergarten teachers to raise their awareness of the importance of electronic stories in developing health concepts in kindergarten children and to teach them how to use them in various educational situations.
- The necessity of educating kindergarten children about healthy habits through engaging methods.

Suggestions for Further Study:

In light of the current study's objectives and results, a number of studies can be suggested as extensions of this research:

The effectiveness of using electronic stories in developing social concepts in kindergarten children. The effectiveness of using e-stories in developing national values in kindergarten children.

The effectiveness of using e-stories in developing social concepts in kindergarten children.

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