

EVALUATION OF PARTICIPANT'S OPINIONS REGARDING "A PINCH OF SCIENCE A SLEW OF FESTIVALS" PROJECT

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ABSTRACT

Science festivals are public events held in specific regions or countries, offering enjoyable and educational activities, particularly for children. These events aim to enhance scientific curiosity and improve participants' skills. The present study was conducted to examine the opinions of individuals who took part in the "A Pinch Science A Slew of Festivals Project" organized as part of the TÜBİTAK 4007 special call. This project comprised 11 workshops. The research focused on 300 participants residing in the Hüdayi container Kırıkhan district of Hatay. The study sample, consisting of 300 participants, was selected through convenience sampling and took part in the science festival. Data collection tools included a Personal Information Form and Science Festival Attitude Scale. The data were collected using a pre-test and post-test design, which is an experimental research approach, and analyzed with the SPSS 22.0 program. The study's results indicate a significant difference in the participants' views before and after attending the workshops of the "A Pinch of Science a Slew of Festivals Project."

Keywords: Science Festival, Tübitak 4007, Science, Education.

"BİR TUTAM BİLİM BİR DÜNYA ŞENLİK" PROJESİ KATILIMCI GÖRÜŞLERİNİN DEĞERLENDİRİLMESİ

ÖZ

Bilim şenlikleri, genellikle belirli bir bölge veya ülkede düzenlenen ve halka açık olan etkinliklerdir. Bu etkinlikler özellikle çocuklar için eğlenceli ve eğitici bir etkinlik olarak kabul edilerek onların bilimsel merakını artırmayı ve yeteneklerini geliştirmeyi sağlamaktadır. Bu çalışma TÜBİTAK 4007 özel çağrısı kapsamında düzenlenen Bir Tutam Bilim Bir Dünya Şenlik Projesine katılım gösteren katılımcıların görüşlerini belirlemek amacıyla yapılmıştır. Bir Tutam Bilim Bir Dünya Şenlik Projesi 11 adet atölyeden oluşmaktadır. Araştırmanın evrenini Hatay İli Kırıkhan İlçesi Hüdayi konteyner kentte bulunan 300 katılımcı oluşturmaktadır. Çalışmanın örneklemini kolayda örnekleme yöntemi ile belirlenen ve bilim şenliğine katılım gösteren 300 katılımcı oluşturmaktadır. Veri toplama aracı olarak Kişisel Bilgi Formu ve Bilim Şenliği Tutum Ölçeği kullanılmıştır. Araştırmada deneysel araştırma deseni olan tek grup ön-test, son-test uygulanarak veriler toplanmış ve veriler SPSS 22.0 programı ile analiz edilmiştir. Çalışma sonucunda elde edilen bulgulara göre Bir Tutam Bilim Bir Dünya Şenlik

Projesi atölyelerine katılan katılımcıların etkinlik öncesi ve sonrası görüşleri arasında anlamlı düzeyde farklılık olduğu tespit edilmiştir.

Anahtar Kelimeler: *Bilim Şenliği, Tübitak 4007, Bilim, Eğitim.*

INTRODUCTION

Science is a dynamic force that shapes and advances society, applicable across various fields, conducting research, observation, guidance, and progress. Science festivals, on the other hand, are events organized to popularize and promote science, innovation, and technology. The Scientific and Technological Research Council of Turkey (TÜBİTAK) arranges festivals encompassing workshops, exhibitions, augmented reality, seminars, discussions, and shows. These festivals aim to stimulate participants' curiosity, encourage scientific exploration and research, and reach a wide audience to enhance their psycho-motor, cognitive, and emotional skills. In 2023, TÜBİTAK introduced the "Special Support Call for Disaster Region" titled "Science is Everywhere" as part of the 4007 science festivals, specifically targeting children and youth affected by the earthquake in Kahramanmaraş, Turkey, which impacted 11 provinces (TÜBİTAK 4007 Call Text, 2023).

According to Durant (2013), science festivals are inclusive events that engage the entire society, featuring exhibitions, workshops, performances, visual arts, and educational activities. These festivals enhance scientific literacy and are open to not only students but also the local community (Park, Kim, and Jeong, 2019: 1). Such activities raise awareness among participants, fostering their social contribution and enhancing their psychological and physical competencies (Aksoy, 2022: 30). By providing personal experiences, science festivals ignite interest in science through hands-on engagement (Demiral, 2022: 134).

There are some studies in the literature related to TÜBİTAK 4007. Gülgün et al. (2019) determined the views of primary and secondary school students and workshop leaders about the science festival, and the study concluded that there was a high level of satisfaction with the festival. The participants in the study evaluating science festivals organized by Akkanat (2020) across different age groups perceived the festival as beneficial. Başar et al. (2021) focused on students' perspectives and highlighted that the enjoyable nature of the festival influenced participation, with technological tools being particularly interesting. Demiral (2022) reported a significant increase in students' views towards science after attending the festival. Kuruöz et al. (2022) examined the attitudes of festival participants and found that the festivals were engaging, attracting attention, and positively impacting personal development. A study by Başar et al. (2018), which examined the views of parents and students participating in the festival, indicated the development of a positive scientific attitude among participants.

Taken together, these studies suggest that science festivals have a positive impact on participants. This project, initiated as a special call by TÜBİTAK, aimed to organize science festivals in disaster areas, mitigating the negative effects of disasters on individuals and contributing to their reintegration into social life. This current study sought to determine participants' opinions about the science festival, focusing on the following research questions.

A PINCH OF SCIENCE A SLEW OF FESTIVALS PROJECT WORKSHOPS

Fun Faces Workshop: Within the scope of this workshop, the participants will be told about the animals they know and love in the animal Slew of by using interactive methods and face painting will be done by the workshop guides.

VR Journey to Planets Workshop: In contrast to the naturally existing reality, virtual reality technologies have revealed a form of reality that can be artificially produced and fictionalized (Aydoğan, Yengin & Bayrak, 2022: 53). During this workshop, the participants will be provided with informative presentations about the planets by workshop guides. These presentations will be accompanied by planetary models, enhancing the understanding of the information. Additionally, the participants will have the opportunity to embark on a virtual planet tour using virtual reality glasses.

My Score in Digital Workshop: This workshop includes a tournament by playing football games for the participants via the Playstation 5 game console.

Paper Dreams Workshop: In this workshop, the workshop guides will encourage participants to use their imagination and create content using the objects available in the environment. Participants will be asked to bring their ideas to life using paper and other materials provided during the workshop.

Old to New, Better Slew of Workshop: This workshop aimed to raise environmental awareness by explaining the importance and necessity of recycling to the participants through the workshop guides. In this context, toys will be made from the recycled materials collected.

Mind Games Workshop: In this workshop, participants will engage in enjoyable activities playing board games that are designed to positively contribute to their mental development. These games will provide an entertaining and interactive experience while stimulating cognitive skills, problem-solving abilities, and strategic thinking.

My Hands Foam Foam Workshop: This workshop will present the importance of hand hygiene, and hand hygiene training will be given to the participants by using the creative drama technique with experiments.

There is a Festival on the Street Workshop: The workshop guides will provide explanations about traditional games, and participants will have the opportunity to engage in group activities involving games like hopscotch, skipping rope, and marbles. These activities aim to promote social interaction among the participants and keep the tradition of these games alive.

Game Station Workshop: Within the scope of this workshop, games will be played to develop the participants' fine and gross motor skills and their sensitivity to teamwork.

Traveling Suitcase Museum Workshop: The objective of this workshop is to create awareness among the participants regarding our cultural heritage and methods of preservation. This will be achieved by educating them about the significance of cultural heritage and its importance in our society. Additionally, as part of the workshop activities, symbols from the Troia Museum will be placed in sandboxes, and participants will have the opportunity to engage in simulated archaeological excavations. These hands-on experiences aim to provide a deeper understanding of our cultural heritage and its historical context.

Workshop in the Light of Science: The main focus of this workshop is to employ enjoyable learning techniques that encourage participants to engage in scientific experiments. The workshop aims to make the learning process more entertaining and interactive by involving participants in hands-on activities.

METHODOLOGY

A questionnaire form was used in this study, which was conducted to determine the views of the participants of the TÜBİTAK 4007 A Pinch of Science, a Slew of Festivals Project about the science festival. In the study, a single-group pre-test and post-test, which is an experimental research design, were applied. The difference in scores between the tests was calculated by applying the pre-test to the participants before the festival and the post-test after the festival.

A Pinch of Science, a Slew of Festivals Project was held on 11-12-13 June 2023 in the Hüdayi container city of Hatay, Kırıkhan and the project consists of 11 workshops. Workshops in the project are "Fun Faces Workshop, VR Journey to Planets Workshop, In the Light of Science Workshop, My Score in Digital Workshop, Paper Dreams Workshop, From Old to New to Better the Slew of Workshop, Mind Games Workshop, My Hands Foam Workshop, a Festival on the Street Workshop, Game Station Workshop, and Traveling Suitcase Museum Workshop".

Universe and Sample of the Study

The universe of the study consists of 300 participants in the Hüdayi container city of Kırıkhan, Hatay. The sample consists of 300 participants who participated in the science festival determined by the convenience sampling method. The number of questions to be used in determining the sample size is 10 times or more, which is sufficient to ensure a sufficient sample size (Boz, Buluk & Aysu, 2017). In this context, the scale consisting of 22 questions was used within the scope of the research and the sample size was chosen as 300. For this reason, a sample size of approximately 13 times the number of questions was preferred.

Data Collection Tools

The Personal Information Form and the Science Festival Attitude Scale were used to determine the views of the participants participating in the project about the science festival. Science Festival Attitude Scale was developed by Keçeci, Kırbağ Zengin, and Alan in 2017. The items of this scale, which was developed to determine the attitudes of primary school students towards science festivals, are in the form of a 5-point Likert type: “strongly agree”, “agree”, “undecided”, “disagree” and “strongly disagree”. There are 3 sub-dimensions in the scale items consisting of 22 questions. These sub-dimensions are the thought that science festivals will contribute to personal development, the belief that science festivals are interesting, and the effect of science festivals on social life.

Factors	Sub-dimensions	Items
1 st factor	Science festivals will contribute to personal development	1,3,4,6,7,9,10,18
2 nd factor	Science festivals are interesting	12,13,15,16,17,21,22
3 rd factor	The effect of science festivals on social life	2,5,8,11,14,19,20

In the study in which the scale was developed, the Cronbach alpha reliability coefficient was found to be 0.82. The data were analyzed with the SPSS 22.0 program.

The Science Festival Attitude Scale was applied as a pre-test before the workshops and as a post-test at the end of the workshops. There is a significant difference in the views of the participants who participated in the A Pinch of Science A Slew of Festivals Project workshops before and after the event.

Data Analysis

The obtained data were analyzed using SPSS (statistical package for social sciences) for Windows 22 program. In the analysis of the data, Kolmogorov-Smirnov, kurtosis, and skewness values, which are the other assumptions of the normal distribution, were used. In the comparison of two independent groups, a t-test (Independent sample t-test) and for dependent groups, a dependent sample t-test (Paired sample t-test) was used. One-way analysis of variance was used to compare more than two unrelated groups, and the Bonferroni test, one of the post hoc tests, was used to determine the source of the difference. The significance level of 0.05 was used as a criterion in the interpretation of the findings. Necessary permissions and ethics committee permission was obtained for the use of the scale.

Research Hypotheses

H1: Is there a significant difference between the science festival attitude scale scores of the participants before and after the TÜBİTAK 4007 science festival?

H2: Is there a significant gender difference between the science festival attitude scale scores of the participants participating in the A Pinch of Science A Slew of Festivals project?

H3: Is there a significant difference in the attitudes of secondary school students who participated in the A Pinch of Science a Slew of Festivals project towards science festivals?

H4: Is there a significant difference in the attitudes of primary school students who participated in the A Pinch of Science One Slew of Festival project towards science festivals?

H5: Is there a significant difference in the attitudes of high school students participating in the A Pinch of Science a Slew of Festivals project towards science festivals?

H6: Does the age of the participants participating in the A Pinch of Science A Slew of Festivals project make a significant difference in their attitudes towards science festivals?

Findings Regarding the Reliability of the Scales

To test the reliability of the science festival attitude scale scores used in the study, the Cronbach Alpha internal consistency test was applied.

Table 1. Reliability Analysis of Scale Scores

	Cronbach's Alpha
Science festival attitude pre-test	0,760
Science festival attitude post-test	0,781

When Table 1 is examined, the science festival attitude scale pre-test and post-test scores are at an acceptable level of reliability.

FINDINGS

Table 2. Findings on Demographic Characteristics

Variable	Group	n	%
Gender	Girl	154	51,33
	Boy	146	48,67
Age	7-10	152	50,67
	11-14	116	38,67
	15-18	32	10,67
	1 st grade	25	8,33
	2 nd grade	48	16,00
Grade	3 rd grade	52	17,33
	4 th grade	47	15,67
	5 th grade	31	10,33
	6 th grade	17	5,67
	7 th grade	26	8,67
	8 th grade	21	7,00
	9 th grade	10	3,33
	10 th grade	2	,67
	11 th grade	18	6,00
	12 th grade	3	1,00
Educational level	Primary school	173	57,67
	Secondary school	94	31,33
	High school	33	11,00

51.33% (n:154) of the study sample were girls, 50.67% (n:152) were between the ages of 7-10, 17.33% (n:52) were 3rd grade students, and 57% .67 of them (n:173) are at primary school level.

Table 3. Findings Regarding the Assumption of Normality

	Kolmogorov-Smirnov			Skewness	Kurtosis
	Statistics	sd	p		
Science festivals contribute to personal development pre-test	0,08	300,00	0,00	-0,28	-0,36
Science festivals contribute to personal development post-test	0,10	300,00	0,00	-0,48	-0,14
The belief that science festivals are interesting pre-test	0,09	300,00	0,00	-0,13	-0,39
The belief that science festivals are interesting post-test	0,14	300,00	0,00	-0,88	1,00
The effect of science festivals on social life pre-test	0,11	300,00	0,00	0,24	-0,80
The effect of science festivals on social life post-test	0,08	300,00	0,00	-0,09	-0,81
Science festival attitude pretest	0,10	300,00	0,00	0,18	-0,74
Science festival attitude post-test	0,07	300,00	0,00	-0,23	-0,51

Kolmogorov-Smirnov and kurtosis skewness coefficients were examined to determine the normality assumption of the data. The values of kurtosis and skewness between ± 2.0 for data with a significance level less than 0.05 obtained from the Kolmogorov-Smirnov tests show that the values show a normal distribution. For this reason, the normal distribution was shown and parametric tests were applied during the analysis.

Table 4. Findings Regarding the Comparison of the General and Sub-Dimensional Pre-Test and Post-Test Scores of the Science Festival

Variable	n	$\bar{X} \pm Ss$	t	sd	p
Science festivals contribute to personal development pre-test	300	3,47 \pm 0,66	-7,91	299	0,00
Science festivals contribute to personal development post-test	300	3,88 \pm 0,67			
The belief that science festivals are interesting pre-test	300	3,44 \pm 0,70	-7,34	299	0,00
The belief that science festivals are interesting post-test	300	3,84 \pm 0,59			
The effect of science festivals on social life pre-test	300	3,45 \pm 0,74	0,09	299	0,92
The effect of science festivals on social life post-test	300	3,44 \pm 0,67			
Science festival attitude pretest	300	3,45 \pm 0,53	-6,47	299	0,00
Science festival attitude post-test	300	3,73 \pm 0,51			

t: Dependent sample t-test

There is a statistically significant difference between the pre-and post-test scores of the science festivals contributing to the personal development sub-dimension (t:-7.91; p<005). Looking at the mean values, the post-test scores (3.88 \pm 0.67) were higher than the pre-test scores (3.47 \pm 0.66).

There is a statistically significant difference between the pre-and post-test scores of the belief that science festivals are interesting ($t:-7.34$; $p<0.05$). Looking at the mean values, the post-test scores (3.84 ± 0.59) were higher than the pre-test scores (3.44 ± 0.70).

There is no statistically significant difference between the pre-and post-test scores of the sub-dimension of the effect of science festivals on social life ($p>0.05$).

There is a statistically significant difference between the science festival attitude general pre-and post-test scores ($t:-6.47$; $p<0.05$). Looking at the mean values, the post-test scores (3.73 ± 0.51) were higher than the pre-test scores (3.45 ± 0.53).

Table 5. Findings Regarding the Comparison of the General and Sub-Dimensional Pre-Test and Post-Test Scores of the Science Festival by Gender

Variable	Group	n	$\bar{X}\pm Ss$	t	sd	p
Science festivals contribute to personal development pre-test	Girl	154	3,51±0,57	1,11	298,00	0,27
	Boy	146	3,42±0,73			
Science festivals contribute to personal development post-test	Girl	154	3,85±0,72	-0,88	298,00	0,38
	Boy	146	3,91±0,61			
The belief that science festivals are interesting pre-test	Girl	154	3,64±0,65	5,28	298,00	0,00
	Boy	146	3,23±0,69			
The belief that science festivals are interesting post-test	Girl	154	3,81±0,63	-0,94	298,00	0,35
	Boy	146	3,87±0,55			
The effect of science festivals on social life pre-test	Girl	154	3,51±0,74	1,49	298,00	0,14
	Boy	146	3,39±0,74			
The effect of science festivals on social life post-test	Girl	154	3,49±0,64	1,24	298,00	0,22
	Boy	146	3,40±0,71			
Science festival attitude pretest	Girl	154	3,55±0,51	3,34	298,00	0,00
	Boy	146	3,35±0,53			
Science festival attitude post-test	Girl	154	3,72±0,53	-0,24	298,00	0,81
	Boy	146	3,73±0,49			

t: Independent sample t-test

The pre-test scores of the belief that science festivals are interesting to show a statistically significant difference according to the gender of the children ($t:5.28$; $p<0.05$). Looking at the mean values, girl students (3.64 ± 0.65) had higher belief scores than boys (3.23 ± 0.69) that science festivals were interesting. Science festival attitude general pre-test scores show a statistically significant difference according to the gender of the children ($t:3.34$; $p<0.05$). Girl students (3.55 ± 0.51) had higher belief scores than boys (3.35 ± 0.53) that science festivals were interesting. The other scale scores do not show a statistically significant difference according to the gender of the children ($tp>0.05$).

Table 6. Findings Regarding the Comparison of the General and Sub-Dimensional Pre-Test and Post-Test Scores of the Science Festival by Age

Variable	Group	n	$\bar{X} \pm Ss$	F	P	Difference
Science festivals contribute to personal development pre-test	7-10 ¹	152	3,47±0,62	2,74	0,07	
	11-14 ²	116	3,53±0,70			
	15-18 ³	32	3,23±0,64			
Science festivals contribute to personal development post-test	7-10 ¹	152	3,86±0,64	1,92	0,15	
	11-14 ²	116	3,96±0,65			
	15-18 ³	32	3,71±0,84			
The belief that science festivals are interesting pre-test	7-10 ¹	152	3,47±0,70	0,64	0,53	
	11-14 ²	116	3,44±0,67			
	15-18 ³	32	3,31±0,78			
The belief that science festivals are interesting post-test	7-10 ¹	152	3,80±0,60	1,52	0,22	
	11-14 ²	116	3,91±0,58			
	15-18 ³	32	3,75±0,54			
The effect of science festivals on social life pre-test	7-10 ¹	152	3,41±0,71	1,33	0,27	
	11-14 ²	116	3,53±0,78			
	15-18 ³	32	3,34±0,71			
The effect of science festivals on social life post-test	7-10 ¹	152	3,42±0,67	3,55	0,03	2>3
	11-14 ²	116	3,54±0,65			
	15-18 ³	32	3,20±0,72			
Science festival attitude pretest	7-10 ¹	152	3,45±0,51	2,06	0,13	
	11-14 ²	116	3,50±0,54			
	15-18 ³	32	3,29±0,54			
Science festival attitude post-test	7-10 ¹	152	3,70±0,50	3,52	0,03	2>3
	11-14 ²	116	3,81±0,49			
	15-18 ³	32	3,56±0,58			

F: One-way analysis of variance

The effect of science festivals on social life post-test scores shows a statistically significant difference according to the age of the children (F:3.55; p<0.05). When the difference between the age groups was examined with the Bonferroni multiple comparison tests, the post-test scores of the science festivals on the social life of the children aged 11-14 were higher than those of the 15-18 age groups. The general post-test scores of the science festival scale show a statistically significant difference according to the age of the children (F:3.52; p<0.05). When the difference between the age groups was examined with the Bonferroni multiple comparison tests, the science festival scale general post-test scores of the children aged 11-14 were higher than those of the 15-18 age group. The other scale scores do not show a statistically significant difference according to the age of the children (p>0.05).

Table 7. Findings on Comparison of Science Festival General and Sub-Dimensional Pre-Test Post-Test Scores According to School Level

Variable	Group	N	$\bar{X} \pm Ss$	F	p	Fark
Science festivals contribute to personal development pre-test	Primary school ¹	173	3,51±0,64	2,49	0,09	
	Secondary school ²	94	3,48±0,68			
	High school ³	33	3,23±0,63			
Science festivals contribute to personal development post-test	Primary school ¹	173	3,89±0,64	0,97	0,38	
	Secondary school ²	94	3,91±0,66			
	High school ³	33	3,73±0,84			
The belief that science festivals are interesting pre-test	Primary school ¹	173	3,46±0,68	0,55	0,58	
	Secondary school ²	94	3,45±0,70			
	High school ³	33	3,32±0,77			
The belief that science festivals are interesting post-test	Primary school ¹	173	3,82±0,60	0,80	0,45	
	Secondary school ²	94	3,90±0,59			
	High school ³	33	3,77±0,54			
The effect of science festivals on social life pre-test	Primary school ¹	173	3,38±0,68	2,69	0,07	
	Secondary school ²	94	3,60±0,81			
	High school ³	33	3,39±0,76			
The effect of science festivals on social life post-test	Primary school ¹	173	3,43±0,67	3,39	0,03	1>3
	Secondary school ²	94	3,56±0,65			
	High school ³	33	3,21±0,72			
Science festival attitude pre-test	Primary school ¹	173	3,45±0,50	1,67	0,19	
	Secondary school ²	94	3,51±0,56			
	High school ³	33	3,31±0,55			
Science festival attitude post-test	Primary school ¹	173	3,72±0,51	2,24	0,11	
	Secondary school ²	94	3,79±0,48			
	High school ³	33	3,58±0,58			

F: One-way analysis of variance

The effect of science festivals on social life post-test scores shows a statistically significant difference according to the school level of the children ($F:3.39$; $p<0.05$). When the difference between the age groups is examined with the Bonferroni multiple comparison test, the effect of science festivals on the social life of primary school children is higher than that of children at the high school level. The other scale scores do not show a statistically significant difference according to the school level of the children ($p>0.05$).

CONCLUSION

This study was carried out within the scope of TÜBİTAK 4007, and important findings were reached in the evaluation of the A Pinch of Science A Slew of Festivals project. With the activities organized within the scope of the festival, it was aimed to convey science and increase the attitude of the participants towards science.

According to the study data, the participant levels of the science festival are mostly female students, and individuals between the ages of 7-10 were primary school students. When the pre-test and post-test scores were examined together with the sub-dimensions of the scale, there was no significant difference between the pre-and post-test scores of the sub-dimension of the effect of science festivals on social life. For this reason, science festivals do not have any effect on social life. When the science festivals contribute to the personal development sub-dimension and the belief that science festivals are interesting sub-dimensions are examined, there is a significant relationship between the pre-test and post-test results. For this reason, the belief that the science festival is interesting and contributes to personal development has a positive effect on the sub-dimension. When the views of the participants who participated in the science festival are examined according to gender, girls think that the science festival is more interesting than boys in the pre-test results. When the hypothesis H2 is examined, there is no statistically significant difference according to gender. When the views of the participants who participated in the science festival were examined according to the age range post-test scores, the 11-14 age range was higher than the 15-18 age range in the sub-dimension of the effect on social life. There is a positive effect in the sub-dimension of the effect of science festivals on social life for the 11-14 age group. In hypothesis H6 “Does the age of the participants participating in the A Pinch of Science A Slew of Festivals project make a significant difference in their attitudes towards science festivals?”, there is no statistically significant difference according to age. When the opinions of the participants who participated in the science festival are examined according to the school level, the effect of science festivals on social life post-test scores show a statistically significant difference according to the school level of the children. The effect of science festivals on the social life of primary school children is higher than that of high school children in their post-test scores. According to the hypotheses “H3: Is there a significant difference in the attitudes of secondary school students who participated in the A Pinch of Science A Slew of Festivals project towards science festivals?”, there is a significant difference at the secondary school level. However, according to the H4 “Is there a significant difference in the attitudes of primary school students who participated in the A Pinch of Science A Slew of Festivals project towards science festivals?” and “H5: Is there a significant difference in the attitudes of high school students participating in the A Pinch of Science, a Slew of Festivals project towards science festivals?” there is no statistically significant difference. H1 “Is there a significant difference between the science festival attitude scale scores of the participants before and after the TÜBİTAK 4007 science festival?” shows that there is a significant difference according to the pre-test and post-test data examined, and science festival has positively affected the views of the participants about the science festival.

As a result of this study, the science festival has a positive effect on the attitudes of the participants toward science and learning science. Considering all these findings, increasing science festivals and organizing festivals for students studying in village schools in disadvantaged groups can increase positive opinions about science by making science popular in society. As a result, students' attitudes towards science festivals and encouraging them to learn science can be contributed.

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