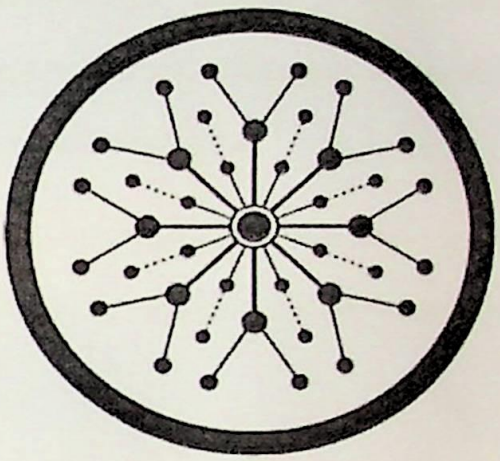
SMOG

A DANGER FOR THE LITTLE ANGELS



MASTER OF PHILOSOPHY

IN

MASS COMMUNICATION

Submitted by

Areej Hayat

SU92-MPMPW-F23-011

Supervised by

Mr. Shabbir Hussain Sadiq

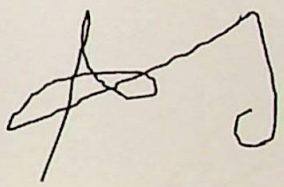
DEPARTMENT OF MASS COMMUNICATION FACULTY OF SOCIAL SCIENCES

THE SUPERIOR UNIVERSITY OF LAHORE, PAKISTAN

Candidate Declaration Form

I solemnly declare that the production file submitted by me in fulfillment of M.Phil. Mass Communication degree, is my original work, and has not been submitted for any other degree or published earlier. I also declare that it shall not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

I also understand that if evidence of plagiarism is found in my production file at any stage, even after the award of degree, the work may be cancelled and the degree revoked.



Signature of Candidate

5.12.25

Date

Areej Hayat

Name of Candidate

Certificate by Supervisor

Date: 5.12.25

This research/project has been carried out under my direct supervision. It has been read/previewed by me and has been found to be satisfactory regarding content, language, format, citations, bibliographic style, and consistency and thus fulfills the requirements for the award of degree MPhil. It is ready for submission to the Department of Mass Communication Management, Superior University, Lahore, for internal and external evaluation.

Mr. Shabbir Hussain Sadiq

Supervisor Name:

Signature of Supervisor

Head of Department Signature

Smog

A Danger for The Little Angels

By Areej Hayat

(Course Instructor/ Supervisor: Mr. Shabbir Hussain Sadiq)

***Format**: Expository Mode*

***Genre:** Information*

***Duration:** 14 min*

1. **Industrial Quotation**
   - The acclaimed Scottish filmmaker, producer and theorist John Grierson, defined documentary as creative treatment of actuality. The definition is published in Crafting Truth – Documentary Form and Meaning by Louise Spence and Vinicius Navarro (2011), Chapter 1, page 2.
2. **Introduction**
   - Smog, or smoke fog, is a type of intense air pollution. The word "smog" was coined in the early 20th century, and is a portmanteau of the words smoke and fog to refer to smoky fog due to its opacity, and odour. The title of the documentary is The Impact of Smog on Daily Activities of School Going Children (4 to 14 years) in Pakistan (Lahore).
   - The educational dimension of the crisis is equally significant. During severe smog episodes, schools are frequently closed or shifted to restricted schedules, resulting in lost instructional time, limited physical activity, and psychological distress among students. Parents face increased anxiety regarding their children's safety, while teachers adapt to inconsistent attendance patterns and disrupted learning environments. The documentary captures these challenges and provides insight into how families and educators navigate a reality in which clean air cannot be taken for granted.
   - Link with SDG GOAL, these are adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs).
   - This Documentary is linked with SDG Goal 13 Climate Action and SDG goal 15 Life on Land.

- The Superior University Faculty of Mass Communication Management is dedicated to preparing its students to be productive, ethically aware, and critically engaged graduates who, by raising difficult issues and refuting accepted wisdom, may transform society.

3. Proposed Topics of the Programs

- The Impact of Smog on the daily activities of school going children
- Smog A Danger for The Little Angels
- Smog and Children

4. Topic Justification

- as title It was selected because it was original and no other documentary maker used the same title, although the time of research.
- This paper fills in that gap by examining smog in the context of children lived experiences, which the documentary film Smog and Childhood illustrates.
- The idea behind the project is that it is an integrative project: it merges environmental science, childhood studies, public health, and media analysis to provide a complete answer on how environmental deterioration transforms childhood itself..

Objective

- Pollution exposes children to increases in health and development hazards.
- Smog interferes with education, social behaviour and emotional well being.
- The Pakistan regulatory environment is not keeping up with environmental degradation.
- Documentary film can become a useful instrument of communicating with society and studying..

6- Target Audience

- The target groups are the environmentalists, politicians, doctors, policy makers and the common people. Moreover, documentary will also interest individuals that are affiliated to the news and information sphere, especially those that produce digital content. They are able to publicize awareness and safety with regards to the well being of the people and disseminate awareness of the significance of the health..

7-Program Concept

This documentary is a mixture of visual, narrative, and qualitative instruments to analyze the childhood experiences in the smog of Lahore. Through the combination of interviews, observational video recordings, secondary research, and thematic analysis, the project provides an all-inclusive, human-centred concept of smog as an environmental and a social crisis..

8-Program Format/Design

The program is a documentary, the program will seek to raise awareness of the ill effects of the smog and the health problems of the attending children.

It shows how the repeated school shutdowns, lack of outdoor experiences, and health issues add up to create a diminished childhood that the youngest residents of Lahore have. The research applies documentary creation techniques, such as interviews, visual pieces of evidence, observational data and story synthesis, to introduce smog not as an environmental problem, but as an increasing developmental and social challenge..

Children

Three school-going children of different age groups were interviewed to capture:

- Daily experiences
- Health concerns
- Restricted playtime
- Emotional responses to smog

b. Parents

Two parents were included to discuss:

- Health management
- School closures
- Indoor confinement
- Household-level coping strategies

c. Teachers

Two teachers were selected to provide insight on:

- Adjusted school routines
- Student attendance patterns
- Academic disruptions
- Administrative responses during smog episodes

These participant groups mirror the social units most directly impacted by smog.

9-Duration

- Duration of the documentary is 13-14 minutes

10-Channel Justification

- The documentary was made for education purposes. Hence, channel justification is not needed at this point

11-Language

- The documentary is made in English; English as an international language can be understood easily by majority of target audience.

12-Synopsis

- Air pollution has become one of the most recalcitrant environmental and general health risks in Pakistan and Lahore has reported some of the highest smog levels in South Asia. This documentary Smog and Childhood: Growing Up in Toxic Air in Lahore focuses on this crisis, analyzing it through the lenses of experiences, vulnerabilities, and broken daily lifestyle of children who live there. The documentary has been adapted to the academic framework in this project report to examine the environmental, medical, social, and educational aspects of air pollution on children. Basing its investigation on scientific research, governmental statistics, professional opinions, and the narrative portions of the documentary script, this paper examines the impact that dangerous levels of the Air Quality Index (AQI) levels, which frequently surpass the limits provided by the World Health Organization by over forty times, have on the respiratory systems, emotional state, cognitive growth, and education habits of children..

13-Table Format Treatment

Documentary Objectives:

- To gauge the effects of smog on children's school attendance, and how does this correlate with academic performance.
- To gauge the impact on children's outdoor play and their overall mental and social well-being.
- To gauge the relationship between smog exposure and respiratory diseases.

- **Audience Profile:**

  General Public, environmentalist, politicians, policy makers from the age of 16 to 50

  Sequence of Events

  Starting from short bits from the interviews conducted and then giving narration of the topic than we shift towards the interviews and voice over narration and adding videos and graphics to support the topic and content. In the end the documentary gives suggestions to counter the menace of fake news for better society.

  Concept and Tone

  The concept of the documentary is expository and the tone is normal and fast paced with information through narration and interviews has been added to support the topic. Describes the concept and sets the tone for entire program to be produced.

14- Estimated cost

Production Activity	Main Budget Heads	Estimated Cost
Pre-production	Research, initial interviews, project consultants,	5000 PKR
Production	Travel Charges (Food/car rentals, etc.)	5000 PKR
	Equipment rentals, film stock and misc. Supplies etc.	20000 PKR
	Cameraman, Voiceover, Director, Producer, etc.	15000 PKR
Post-production	Digital and video editing, post-production sound, licensing of archival footage, music rights, titles and visual effects.	10000 PKR
	Editor's charges, sound mixer's charges, etc.	8000 PKR
Total Budget = 63,000 PKR		

15-Technical equipment

Director/Producer: Areej Hayat
Topic: Smog A Danger for The Little Angels
Location: Lahore
Cameraman: Farhan Ali
Audio man: Muhammad Azhar
List of equipment:

- Camera: DSLR Sony A 7 III
- Lens: Sony G-Master 85 mm 1.4F
- Mic: Sennheiser G3 cordless
- Lights: Ice Lights (for indoor)
- Drone: DJI Air 3s
-

16-Production Schedule

- October2025-November 2025
- Research Proposal Approval: July 2025
- Scripting and collection of data: August 2025
- Reece of the location: October 2025, November2025
- Shooting at location: October to December2025
- Preview of rushes: October 2025
- Continuity sheet: October 2025
- Visual logging for EDL, script drafting: November 2025
- Final script, collection of music, treatment final: December 2025
- Editing: December 2025
- Submission of the project: December 2025

17-Shooting schedule

Reference Tips for shoot day

- It is important to prepare questionnaire well in time and double the questions
- Interview timings should be decided and communicated to the production crew and interviewee
- The pre-shoot meeting with technical support really improves the quality of production as all expected shots and required footage could be explained to the team.
- It is also very essential to pre-test equipment for sound and video quality check and prepare battery and memory backup.
- Making a list of possible and necessary B-Roll shots also help the production schedule to roll out more smoothly.

18-Reece Report

- Reece date: October 2025
- Production Genre: Documentary
- Topic: Smog A Danger for The Little Angels
- Producer: Areej Hayat
- Location: Office of Beacon House School, Badshahi Masjid, Government Public Schools, Road cites of Lahore.

Write down following both positive and negative aspects

- ***Look around the location:*** The locations were familiar, lighting and sound were checked but as the Reece was done on a working day, offices were busy and it would be hard to shoot during peak hours.
- ***Talk to people there:*** Rapport was established with interviewees and on location facilitators and assistants
- ***Check the position of the sun:*** It was not needed as the location was indoor.
- ***Level of lighting is required:*** The offices were already well lit but an additional LED light was required to be attached with camera for better quality and no issues of shadows were encountered.
- ***Work out possible sequences:*** Test shots were taken to make sure that there are no real time issues with the footage.
- ***Check the electricity supply and for high power hazards for sound or video, also for the safety aspects:*** Power supply and backup issues were also assessed during the Reece.
- ***Check for noise problems both obvious and hidden:*** The noise issues were encountered initially as it was working hours on the location but the issues were taken into consideration on the day of shoot.
- ***Double check shooting permissions:*** The permission were sought from the relevant officers and supervisors well in advance.
- ***Check contact are clear about shooting time and dates:*** The availability was made sure before the shooting schedule and reminders were sent accordingly.
- ***Look for publicity photos***. If you think of any, make a note to arrange for photographer to come on shooting day: The photographer was accompanying on the day Reece day and technical feedback was taken with reference to shots and camera angles.

19-Talent/Interviews

- Mr Jawad Ahmad, Parent
- Mr Umair Farooq, Parent
- Ms Attiqa Farman , School Head
- Ms Afshan , Educationist/Teacher

- Ms Dua, Student
- Mr Ahmad Abdullah, Student
- Mr Muhammad Ibrahim, Student

20-Script and shooting script of documentary

--Detailed Script --

""Every winter, as the sun rises over Lahore, a grey blanket descends—not just fog, but smog that chokes the city and lingers in the lungs of its youngest residents." Once renowned for its gardens and Mughal-era architecture, Lahore is now frequently listed as one of the most polluted cities in the world. Children in the city who attend school pay a great penalty as pollution levels rise: it affects their play, health, and childhood. Recent studies show that extremely tiny particulate matter levels in Lahore are more than 40 times higher than what the World Health Organization deems safe.

The city's Air Quality Index occasionally rises to "hazardous" or even "worst in the world" levels.

A scientific study that used satellite (MODIS) data found "aerosol hot-spots" throughout Lahore, particularly near major highways and industrial zones, demonstrating how traffic, urbanization, and industrial activity contribute to the air pollution.

What do these figures signify for kids? For many, it means that the everyday promise of play, school, or riding a bike to class becomes a risky decision.

When it comes to air pollution, children are particularly vulnerable. They breathe more quickly in relation to their body size, their immune systems are more vulnerable, and their lungs are still maturing.

Smog can cause or worsen a variety of respiratory conditions, including bronchitis, asthma, pneumonia, and long-term lung damage. Over time, even children who were previously healthy may acquire new illnesses.

Coughing, sore throats, eye discomfort, and throat soreness become widespread, making it difficult to play, study, or even breathe.

Repeated exposure may cause long-term lung damage and raise the chance of developing chronic illnesses later in life, according to medical professionals. Some even draw comparisons between its long-term effects and smoking.

Schools frequently close or change their schedules when pollution levels get too unhealthy. Recently, Lahore's government and private elementary schools were closed for a week because of

tthe air pollution. Physical education, sports, recess, and outdoor activities are frequently iinterrupted, depriving kids of opportunities for play and exercise. Many parents are instructed to kkeep their children indoors, with windows closed and little time spent outside. Children sometimes aattend courses or assemblies indoors, with outside gatherings being cancelled.

LLoss of instructional time, less physical activity, emotional tension, and a feeling of confinement aare just a few of the consequences. These disruptions can affect a child's social development, hhealth, and general well-being in addition to their immediate schooling.

According to international studies, early-life exposure to air pollution, particularly during infancy oor early childhood, can have long-term consequences, including decreased lung capacity, an eelevated risk of chronic illnesses, and even problems with cognitive development or academic pperformance.

A generation of children may be growing up with compromised health in a city like Lahore, where ssmog is seasonal but persistent. This could strain public health systems, lower the quality of life, aand have long-term effects on society's productivity.

WWhen smog levels are at their highest, Lahore authorities have taken emergency measures, such aas closing schools, limiting outdoor activities, outlawing vehicles that emit a lot of pollution, and aadvising people to stay indoors.

However, even though these steps are essential, they are frequently implemented reactively when ppollution levels are already dangerously high. Long-term remedies, according to scientists, include ggreater regulation of industrial emissions (such as those from unregulated brick kilns), a decrease iin vehicle pollution, cleaner urban planning, and reforestation.

UUsing masks, air purifiers, keeping an eye on kids' health, and minimizing outside exposure are aall ways that parents and schools may contribute, even though they are not always available or eeconomical.

SSmog poses a threat to the health, education, and childhood of Lahore's children, making it more tthan simply a seasonal annoyance. However, it need not be their fate.

TTo guarantee that clean air is a fundamental right rather than a privilege, communities, parents, sschools, and legislators must work together. For each infant to have unrestricted breathing and to hhave fun. To acquire knowledge, to develop.

""Even though our cities are changing, kids still need to grow up healthy." Let's make things clear ffor their future.

21-Director's shooting list

- Research for this project was more important and getting exact videos which were the reason of this documentary. List down the locations which are polluted with smog.
- Children footages wearing masks. Some footages are taken from the last year smog and closure of schools.

22-EDL, Edit Decision List

Editing decision was taken as per the narration and interviews were finalized and recorded. Some archival footages are also taken. News and statical reports are taken from the goggle.

23-Continuity Sheet/Preview Visual Logging

- Mostly the documentary is based on outdoor shoots areas covered with heavy smog and some are archival footages from the news channel.
- Interviews were taken at their office therefore they were seated at their working chairs in their rooms.
- Outdoor interviews are also taken of the children wearing masks.

24-Research Material

- Smog in Lahore has turned into a seasonal irritation and a long-lasting community health crisis, which has influenced the tempo of everyday existence. Defined by high concentrations of particulate matter, nitrogen oxides, sulfur dioxide, and other toxic emissions, this toxic haze has now been identified as a structural environmental problem associated with industrial growth, rapid urbanization and poor environmental control. A winter smog in Lahore develops as a result of the pollution created during the year being trapped by the weather patterns and inversion as well as still air. Although everyone who lives in the area is at risk of its dangers, children are the most vulnerable to its effects, both physiologically and socially..
- **Smog as an Urban and Environmental Crisis**
- The change of Lahore caused by the last 20 years of development has subjected the environment to enormous strain due to the metamorphosis of Lahore into a densely populated megacity. The automobile emissions have gone through the roof as people have become more reliant on personal transportation and industries, brick kilns, building construction sites, and agricultural activities are still emitting huge amounts of pollutants. Local air quality monitoring and satellite-based research has continuously classified Lahore as an aerosol hot spot showing the magnitude of the accumulated particulate matter. Regardless of any measures, the AQI indices in the most active

months of winter period have a regular frequency of readings with a threat to people and their health, which become Hazardous..

- **Children's Heightened Vulnerability**
- Smog has a relatively high impact on children due to a number of biological and developmental factors. Their respiratory systems have not yet developed, their breathing rates are more rapid in comparison with body weight and their immune defenses are comparatively undeveloped. The particles get deeper into the lungs of children leading to inflammation, infections and permanent damages. Pediatricians in Lahore constantly report outbreaks of respiratory diseases including asthma attacks, bronchitis, pneumonia and allergies outbreaks during the smog season. These acute health problems are not only disturbing, but they can be predisposing to chronic diseases in the adulthood.
- The documentary shows all the minor problems children have to deal with: coughing fits at the outdoor assembly, burning eyes on their way to school and limited playtime. Children are forced to be inside a day or even weeks without being allowed to exercise, socialize and the mind lacked cognitive stimulation. These disturbances accumulate not only interfering with the immediate health but with emotional health and the overall development..
- **Educational and Social Dimensions**
- At Lahore the smog management strategies tend to be taken out on schools. Partial shutdowns, reduced hours, the cancellation of outdoor activities, and isolation of the school indoors changes the organization of the school day. Though these measures are meant to protect the students, they have the effect of increasing learning gaps, low concentration levels, and anxiety among the children. Parents and teachers have more responsibilities working in unreliable routines and balancing between risks to health and education requirements.
- These realities are depicted in the documentary through the use of parental issues, student behaviours, and school-level modifications. Smog is not only a health issue of concern to many families, but also a socio-economic issue of concern because medical costs are increasing, and daily lives are becoming erratic. The effect is more severe in low-income neighborhoods, where people have little or no access to masks or air purifiers, or having homes with good ventilation..

- **Literature Review:**

The following is a list of some of the most remarkable documentaries that touch upon smog, air pollution, and environmental issues regarding urban pollution: Under the Dome (2015) Director: Chai Jing Chinese documentary, which is devoted to the shocking air pollution in China, in particular smog and the consequences of bad air on people. Chai Jing is a former journalist who researches the effects and the origins of the smog crisis in China. 2. Director of The China Syndrome (1979): James Bridges This is not a documentary but a fictional thriller that talks about nuclear energy, yet brings

about the subject of environmental pollution and life-threatening circumstances. It is frequently referred to as applicable to the debate of pollution and environmental effects of industry. 3. Director: "A Dangerous Smoke" (2019) This documentary examines the connections between air pollution (including smog) and multiple health issues, and it is focused in particular on cities in China and India. It also explores the political and economic forces that caused the pollution crisis. 4. Smog Town (2018) Director: N/A This is a short documentary dedicated to the problem of smog in such cities as Los Angeles and the crisis of the public health due to air pollution. It gives an account of the history and the ongoing problem of smog, especially in the U.S. 5. Director: The Air We Breathe (2008) This documentary talks about the quality of air and its connection to the health of people in the different areas, specifically the impact of air pollution (including smog) on the global cities. 6. "Chasing Ice" (2012) Director: Jeff Orlowski Although it is more of a climate change and ice melt documentary, the wider environmental crisis that is covered by air quality, pollution, and smog as a side-effect of industrial emissions is addressed. These documentaries touch on various dimensions of air pollution such as smog, not only health effects, but social effects and environmental issues. Indeed, the following are some of the newspaper articles that address the smog problem in Lahore, Pakistan: 1. Punjab govt marks comprehensive plan to combat smog in Lahore - This news item in The Nation describes the plans of the Punjab government to deal with environmental pollution and smog by planting trees and tightening of the noose on the emissions of industries. Nation 2. Factories that use plastic as fuel are the biggest polluters of smog in Lahore - this article, published in The News, demonstrates that small industry units that burn plastic and tires are one of the main contributors to the pollution level in Lahore. The News International+1Daily Times+1 3. Hundreds fall sick to toxic smog in Lahore This article by The Nation tells about the health effects of smog, where more than 500 people had to seek medical attention because of illnesses caused by smog. Nation 4. Smog in Lahore prompts schools closure one week later - This article also appeared in The Nation and concerns the temporary closure of schools in Lahore, following the dangerous level of air quality because of smog. 5. Record smog in Lahore as pollution hits dangerous levels- This article in The Print discusses the high levels of pollution in Lahore, which has increased air quality indices to dangerous levels, seriously impacting the health of the residents. These articles give a broad perspective of the menace of smog in Lahore, its health effects, causes, and how the government has responded to the menace. Having read numerous documentaries and articles on the topic I have observed that my aspect on the activities of school going children is different and unique compared to the other documentaries and articles on the relevant topic..

5-Production Problems

- The big production issue that was encountered in the visit of the schools and seeking an authorization to record the videos of children activities within the school.
- **Not every school was ready to allow shooting their school environment and areas..**

26-Resolution

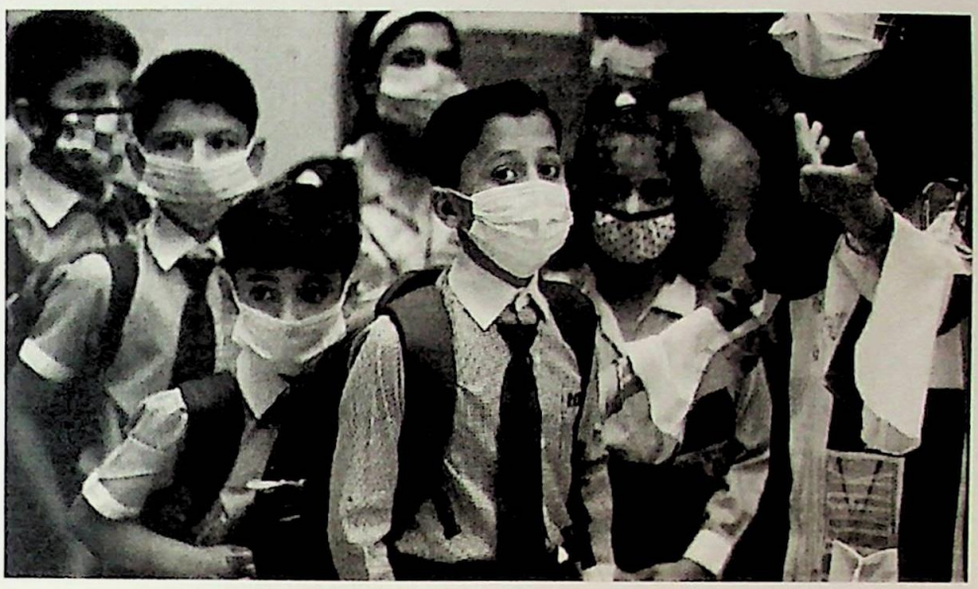
- The documentary and supportive analysis depict how smog in Lahore is not a seasonal environmental condition, but a long-term crisis of which the definition of growing up in the city takes a new meaning. This affects children more than others because of their biological vulnerability and social dependency. Every winter, their health, emotional stability, educational progress, and general quality of life is threatened..

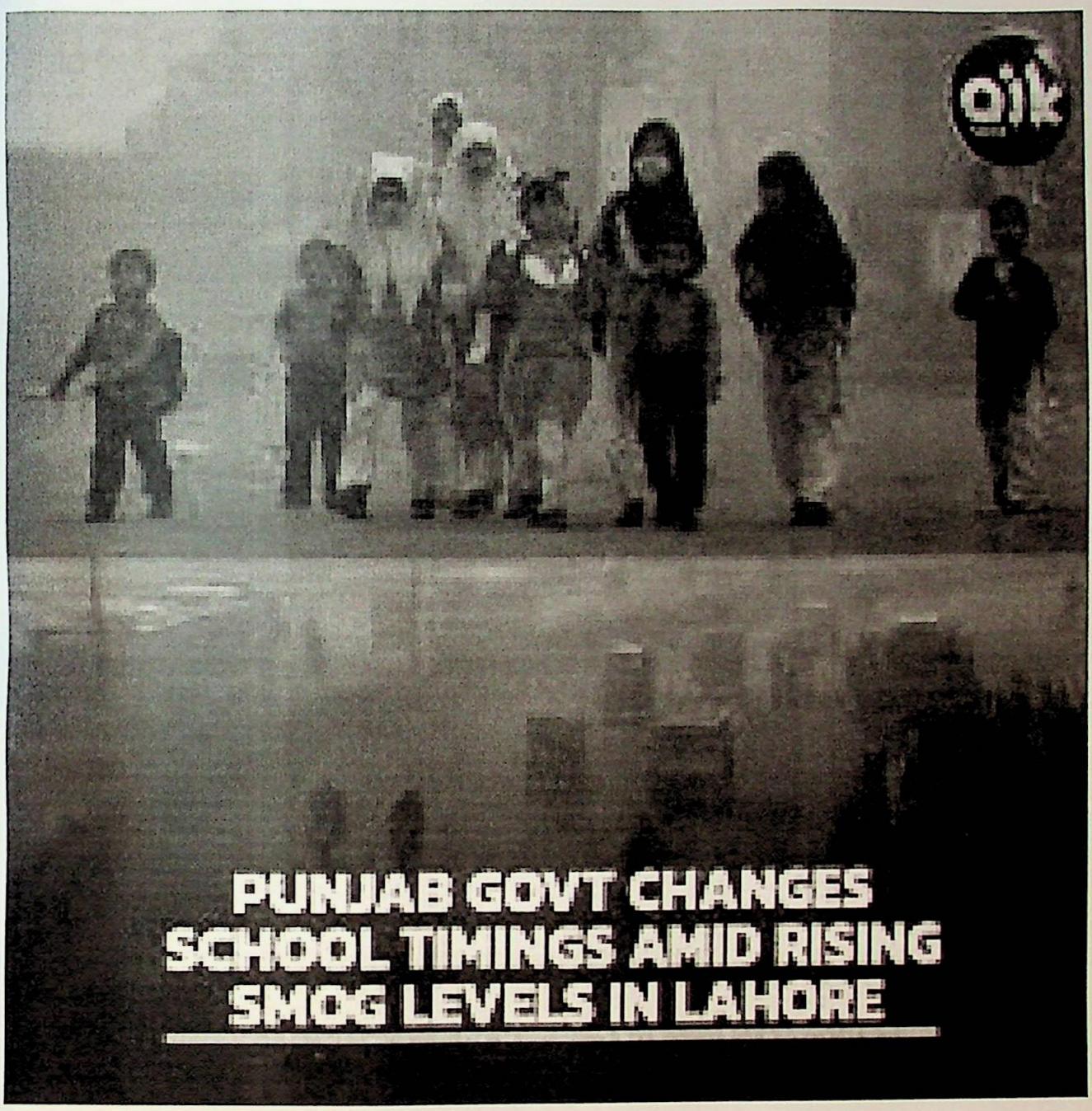
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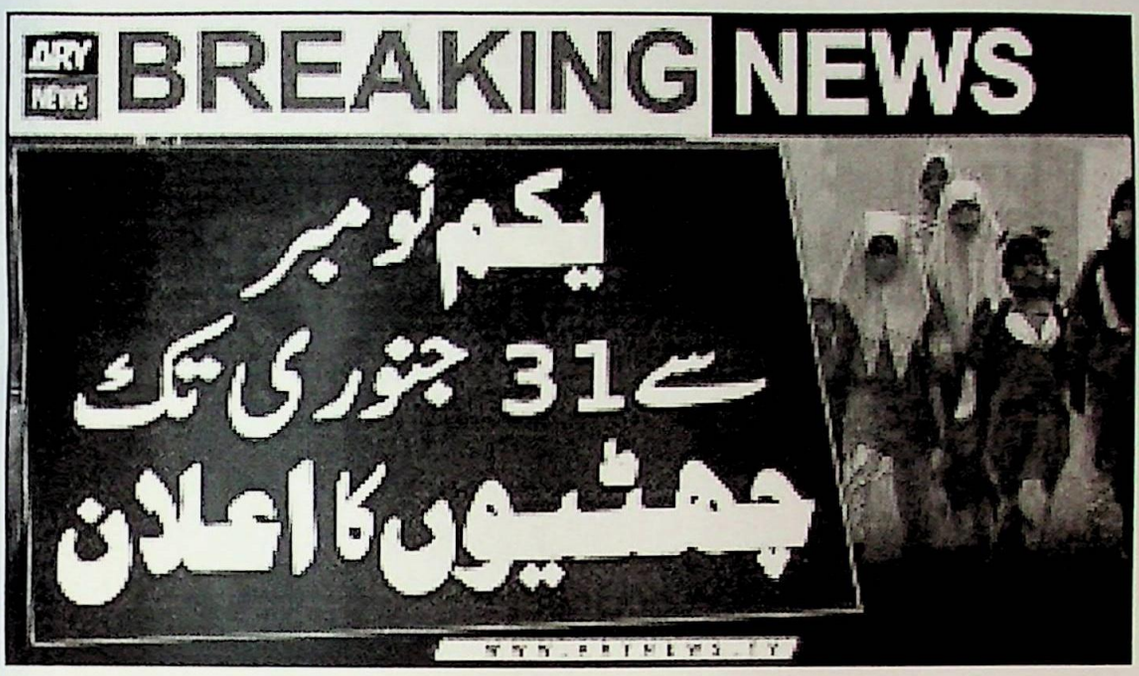
27- Ending Credits

- Acknowledgment: I would like to thank Mr. Shabbir Hussain Sadiq and Dr Sajid Hussain for their leadership and dedication to student learning and intellectual growth. I would also like to extend my gratitude to Mr Usman Raza for his unwavering support and constructive feedback throughout the documentary production.
- Project supervisor: Mr Shabbir Hussain Sadiq, Faculty Member, Mass Communication Management, Superior University, Lahore.
- Narrator: Eleven Labs (AI tool for professional voice overs)
- Research and script: Areej Hayat, MPhil Scholar & Mr Usman Raza, COO Suno Television
- Transportation: Private
- Cameraman: Farhan Ali
- Audio man: Muhammad Azhar
- Production Facilities: Plugin Communications
- Graphics Packaging: Plugin Communications
- Non-linear Editor: Khushnood Ali
- Facilitator: Mian Ali Sher
- Producer/Director: Areej Hayat
- Produced and submitted: As a part of MPhil Honour degree program

28-Enclosure




PUNJAB GOVT CHANGES
SCHOOL TIMINGS AMID RISING
SMOG LEVELS IN LAHORE


ARY NEWS
BREAKING NEWS
یکم نومبر
سے 31 جنوری تک
چھٹیوں کا اعلان


BREAKING NEWS
SCHOOL CLOSED
سموگ کے باعث
تعلیمی سرگرمیاں متاثر!!





سکول ایجوکیشن ڈیپارٹمنٹ نے ایک ہفتے سے زائد تعطیلات کا نوٹیفکیشن جاری کر دیا

References

Script Quote: *"Recent studies show that extremely tiny particulate matter levels in Lahore are more than 40 times higher than what the World Health Organization deems safe."*

- **Fact Validation:** The WHO annual guideline for PM2.5 is **5 µg/m³**. Lahore frequently records levels exceeding **200-300 µg/m³** (and sometimes 600+) during smog season, which aligns with the "40 times higher" figure.
- **Recommended Citation (Journalistic/Data Source):**

The Express Tribune. (2024, November 3). Lahore gasps as pollution hits record levels. *The Express Tribune. IQAir.* (2024). *World Air Quality Report 2023.* IQAir.

Script Quote: *"A scientific study that used satellite (MODIS) data found 'aerosol hot-spots' throughout Lahore, particularly near major highways and industrial zones..."*

- **Fact Validation:** This specific claim refers to a study by researchers at the Lahore University of Management Sciences (LUMS) and others who utilized MODIS (Moderate Resolution Imaging Spectroradiometer) data to map pollution clusters.
- **Recommended Citation (Academic Source):**

Ashraf, S., Khalid, Z., Tahir, M., & Uppal, M. (2020). Identification and quantification of aerosol hot-spots over Lahore region using MODIS data. *arXiv preprint arXiv:2010.12373. Note: This paper explicitly identifies hot-spots near "industrial areas and major urbanized highways," matching your script's text perfectly.*

Script Quote: *"They breathe more quickly in relation to their body size... lungs are still maturing."*

- **Fact Validation:** This is a medical consensus regarding pediatric physiology and environmental exposure.
- **Recommended Citation (Organization Source):**

World Health Organization. (2018). *Air pollution and child health: Prescribing clean air.* World Health Organization. American Lung Association. (2024). *Children and Air Pollution.*

Script Quote: *"According to international studies, early-life exposure... can have long-term consequences, including... problems with cognitive development or academic performance."*

- **Fact Validation:** Several major international studies have linked traffic-related air pollution (TRAP) to slower cognitive development in school children.

- **Recommended Citation (Academic Source):**

Sunyer, J., Esnaola, M., Alvarez-Pedrerol, M., Forns, J., Rivas, I., López-Vicente, M., ... & Querol, X. (2015). Association between traffic-related air pollution in schools and cognitive development in primary school children: a prospective cohort study. *PLOS Medicine*, 12(3), e1001792. *The Lancet Planetary Health.* (2025). Pollution and health: a progress update.

Script Quote: *"Recently, Lahore's government and private elementary schools were closed for a week because of the air pollution."*

- **Fact Validation:** This refers to the recurring smog-related closures mandated by the Punjab Government, specifically the notifications issued in November/December 2024 and 2025.

- **Recommended Citation (Government/News Source):**

Government of Punjab. (2025). *Notification: Closure of Educational Institutions due to Smog.* Environmental Protection Department (EPD). *Dawn.* (2024, November 6). Punjab govt orders school closures, shift to online education amid deathly smog. *Dawn News*.

Script Quote: *"Some even draw comparisons between its long-term effects and smoking."*

- **Fact Validation:** The Air Quality Life Index (AQLI) often compares pollution to smoking in terms of life expectancy reduction.

- **Recommended Citation (Research Institute):**

Energy Policy Institute at the University of Chicago (EPIC). (2024). *Air Quality Life Index (AQLI) Annual Update.*

Summary Bibliography Format (APA Style) for your Report:

1. **Ashraf, S., Khalid, Z., Tahir, M., & Uppal, M.** (2020). Identification and quantification of aerosol hot-spots over Lahore region using MODIS data. *arXiv preprint.*
2. **Dawn.** (2024, November 6). Punjab govt orders school closures due to smog. *Dawn.*
3. **IQAir.** (2024). *World Air Quality Report.*
4. **Sunyer, J., et al.** (2015). Association between traffic-related air pollution in schools and cognitive development. *PLOS Medicine.*
5. **World Health Organization.** (2021). *WHO global air quality guidelines.*
6. **The Express Tribune.** (2024, November 3). Lahore gasps as pollution hits record levels.

Smog_A_Danger

ORIGINALITY REPORT

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3	theinfolist.com Internet Source	1%
4	admin.umt.edu.pk Internet Source	1%
5	Submitted to Georgia State University Student Paper	1%
6	www.pakistantoday.com.pk Internet Source	<1%
7	gim.ac.in Internet Source	<1%
8	Submitted to College For Creative Studies Student Paper	<1%
9	Submitted to Notre Dame of Marbel University Student Paper	<1%
10	discoursereview.com Internet Source	<1%
11	www.ngv.vic.gov.au Internet Source	<1%
12	norr.numl.edu.pk	

**% detected as AI

AI detection includes the possibility of false positives. Although some text in this submission is likely AI generated, scores below the 20% threshold are not surfaced because they have a higher likelihood of false positives.

Caution: Review required.

It is essential to understand the limitations of AI detection before making decisions about a student's work. We encourage you to learn more about Turnitin's AI detection capabilities before using the tool.

Disclaimer

Our AI writing assessment is designed to help educators identify text that might be prepared by a generative AI tool. Our AI writing assessment may not always be accurate (i.e., our AI models may produce either false positive results or false negative results), so it should not be used as the sole basis for adverse actions against a student. It takes further scrutiny and human judgment in conjunction with an organization's application of its specific academic policies to determine whether any academic misconduct has occurred.

Frequently Asked Questions

How should I interpret Turnitin's AI writing percentage and false positives?

The percentage shown in the AI writing report is the amount of qualifying text within the submission that Turnitin's AI writing detection model determines was either likely AI-generated text from a large-language model or likely AI-generated text that was likely revised using an AI paraphrase tool or word spinner.

False positives (incorrectly flagging human-written text as AI-generated) are a possibility in AI models.

AI detection scores under 20%, which we do not surface in new reports, have a higher likelihood of false positives. To reduce the likelihood of misinterpretation, no score or highlights are attributed and are indicated with an asterisk in the report (*%).

The AI writing percentage should not be the sole basis to determine whether misconduct has occurred. The reviewer/instructor should use the percentage as a means to start a formative conversation with their student and/or use it to examine the submitted assignment in accordance with their school's policies.

What does 'qualifying text' mean?

Our model only processes qualifying text in the form of long-form writing. Long-form writing means individual sentences contained in paragraphs that make up a longer piece of written work, such as an essay, a dissertation, or an article, etc. Qualifying text that has been determined to be likely AI-generated will be highlighted in cyan in the submission, and likely AI-generated and then likely AI-paraphrased will be highlighted purple.

Non-qualifying text, such as bullet points, annotated bibliographies, etc., will not be processed and can create disparity between the submission highlights and the percentage shown.