



Impacts of the Industrial Revolution

Transcript

MALE VO: Have you ever worked in a coal pit?

FEMALE VO: Aye, I have worked in a pit since I was six years old.

MALE VO: Have you any children?

FEMALE VO: Yes. I have had four children; two of them were born while I worked in the pits.

MALE VO: Did you work in the pits while you were in the family way?

FEMALE VO: Aye, to be sure. I had a child born in the pits, and I brought it up the pit shaft in my skirt.

PRESENTER: Betty Wardle; interviewed by the 1842 Parliamentary Commission on women in mines.

Conditions for workers during the Industrial Revolution were not only poor, they were downright dangerous. The risk of serious injury, death or long term illness was very, very real.

Working Conditions – Short Term Impacts

The first generation of workers laboured between ten and fourteen hour days, six days a week. There was no holiday pay. And in stages, there were no laws or government regulations that protected workers' rights.

People of any age could be employed in the factories and mines. The use of child labour didn't begin with the Industrial Revolution. Children had worked under their parents' supervision in the fields or at home for generations as a way of supplementing the family income. So the factories, seeking a workforce, promoted themselves as 'wonderful places where the whole family could earn money.'

Children were an economical source of labour. They didn't need to be skilled as operating most machines was simple and were paid one-tenth of the adult male wage. Children as young as six were known to work sixteen hour days. Their jobs often included dangerous activities like the maintenance and repair of machines – while the machine was operating – because their small hands could access hard to reach areas.

In textile factories, children performed the vital role of 'scavengers'. They had to crawl under the machines to pick up loose cotton and anything else that might interfere with the machines. Sometimes, their hair would become entangled in machines and could rip a chunk of hair from their head in an instant.





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In 1789, Richard Arkwright's spinning factory employed 1150 workers, two thirds of whom were children. Dr Turner Thackrah, commenting on the condition of children as they left the Manchester cotton mills said, they are: "Almost universally ill-looking, small, sickly, barefoot and ill-clad. Many appeared to be no older than seven."

As landowners enclosed common lands in rural areas, the working class – eighty percent of the population – were forced into the towns and cities. They were the first to make the transition from farming work, which was slow paced and not strictly regimented, into the factory.

Factory work demanded the strict organisation of workers. There were time pressures on highly repetitive and regimented work roles. The introduction of gas lighting in the factories also meant that, for the first time in history, manufacturing could be continuous - twenty four hours a day. It was the dawning of a new work culture, and the wealthy elite became obsessed with efficiency, order and maximising profits at the expense of the poor, the young and the vulnerable.

When a workplace accident occurred, the worker was usually abandoned. Health benefits or compensation for injured workers did not exist. If they were no longer able to work, they lost their job – their only source of income. Because of the unsafe working environment, there were many accidents. Machinery wasn't fenced off and lighting and ventilation were poor. The factories were stifling hot, dark and depressing places.

Workers were known to be beaten and abused by management, but had no one to complain to, not even the government. Only wealthy landowners and new industrialists were allowed to vote for members of the parliament. This meant workers had no democratic political institutions to give them a voice. In fact, the parliament passed the Combination Acts in the year 1800, making it illegal for workers to unite - or unionise – to push for better conditions. But the workers would soon revolt.

Working Conditions – Long Term Impacts

The Luddites - a group of textile artisans - protested and fought against the machinery that was making their skills redundant. They were a secret society who took a secret oath to support one another in acting against the authorities. They would meet on the moors outside of town, under the cover of night to plan their attacks. These involved breaking into factories to smash the machines that were stealing their jobs.

New laws were passed by parliament that made it illegal to be a member of such organisations. Penalties included execution or transportation to a penal colony far away. In 1812, eight suspected Luddites from Manchester were found guilty and hanged. One was just sixteen years old. The only evidence the court required to prove guilt was their attendance at a food riot - along with hundreds of others.





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The Luddite movement didn't last long. They were forced to stop their activities with harsh punishments and cruelty. History shows that their fight against new technologies was doomed to failure. However, the Luddites did help instigate movements who fought for better working conditions. Soon, other voices joined in.

Some writers and wealthy individuals – similarly disturbed by the impact of the Industrial Revolution - sought to create a new model for living - a utopian society.

Robert Owen wanted to establish a utopian factory community. Having made his fortune managing textile factories in Manchester, in 1799, he bought four cotton mills in the small Scottish town of New Lanark. Owen didn't agree with the commonly held belief among factory owners that the surest way to make the most profit was to pay low wages, enforce long hours and give no consideration to workers' welfare.

A forward-thinking man, he provided education, housing and health care to working families, and kept the streets and factories clean and well maintained. He banned physical punishment for young children, which was a common form of discipline. Children under the age of ten weren't allowed to work in Owen's factories. Instead, they had to attend school. He established the first nursery for children under six. Owen succeeded commercially and became renowned throughout the UK and Europe for his progressive ideas.

Trade unionism blossomed in the 1820s, particularly in the textile industry, even though union activities and tactics were illegal and carried severe penalties. Attitudes slowly shifted through the decade. In the 1830s, the British parliament started to investigate working conditions in mills, mines and factories.

The Factory Act of 1833 was the first piece of legislation to officially address industrial relations. The key provisions of the Act were: children aged eight or younger were not allowed to work in factories. Those aged nine to thirteen could work no more than nine hours a day. Thirteen to eighteen - no more than twelve hours a day. And children were not allowed to work at night.

Unfortunately, the parliament appointed just four factory inspectors to police these laws in the thousands of factories across England.

Inspired by the ideas of Robert Owen, a group of tradesmen decided to form the London Working Men's Association. They published the People's Charter which demanded better wages and conditions and the right for workers to vote for members of parliament. Supporters of the document became known as Chartists.

In 1842, nearly half a million workers, encouraged by the People's Charter, went on strike across the country, protesting against wage cuts. Some protesters were killed, hundreds were arrested and many were sentenced to transportation to the Australian colonies. In time, worker protests started to address issues outside as well as inside the workplace. They demanded a more just and equal society that properly shared the wealth of the nation.





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The Environment – Short Term Impacts

In 1750, Manchester, Liverpool, Leeds, Birmingham, Glasgow and Belfast were medium sized market towns. By 1850, their populations had at least doubled and were on a par with London.

In pre-industrial Britain, more than eighty percent of the population lived in rural areas. Migration to these industrial towns caused urban populations to explode, creating housing shortages.

The housing - made from cheap materials - was designed to accommodate the maximum amount of families in the minimum space. This led to cramped and crowded living conditions along narrow streets that soon filled with rubbish and sewage. There were no toilets in homes and no sewage system to take the waste away. Human waste was disposed of in cesspools shared by a collection of houses.

'Nightmen' would then empty the cesspools. However, the factory owners - who paid the nightmen for their services - would use them sparingly to keep costs down. As they worked at night, it was easy to cheat the residents out of this service. The cesspools would often overflow, contaminating vital sources of drinking water like rivers and wells. The nightmen emptied carts full of sewage and other waste into these water sources.

Conditions were perfect for the spread of diseases including cholera, tuberculosis, typhus, typhoid and influenza. Tuberculosis, which is spread by contaminated water, caused one third of all deaths in Britain between 1800 and 1850. Poor nutrition and medieval medical treatments such as using leeches to reduce swelling or fever didn't help people's chances of survival.

There were no laws governing the disposal of industrial waste either. Heavy metals, solvents and toxic sludge were dumped into rivers and streams - along with the human waste. The Thames River became so polluted that it was the source of repeated cholera outbreaks in London. Cholera gained the title "King Cholera" because it could spread via contaminated water so quickly.

Huge amounts of coal were burnt to provide energy for industry and heat for homes. The plumes of industrial pollution that spewed from factory smoke-stacks gave cities their common nickname - the 'big smoke'. The black smoke not only polluted the air and darkened the skies, it also had serious health impacts. Coal soot, a choking black dust, settled on everything. The mixture of smoke and fog that was choking Britain's industrial towns and cities became known as 'smog'.

The Environment – Long Term Impacts

In later years, people began to develop some awareness of the impact of industry on air and water quality, ecosystems and the climate of the planet. London was one of the first cities to build a sewage system, greatly improving the safety of their drinking water.

The air pollution problem was finally tackled after the 'Great London Smog' of December 1952, which killed more than four thousand people.





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The first Clean Air Act, passed in the UK in 1956, sought to move power stations and other heavy industry out of the cities.

The 1960s saw people around the globe become more concerned about the social, political, economic and environmental costs of industrialisation.

Today, as the world's population continues to increase, advances in technology continue and demand for the first-world lifestyle grows. Meanwhile, the earth's natural resources and raw materials are being depleted and the environment decimated.

Though governments and corporations have been slow to acknowledge the environmental costs of our modern lifestyles, most now agree that greater regulation is needed. And yet deforestation continues because of a demand for – fuel for heating and cooking, timber for building, cleared land for farming, factories and housing. Deforestation not only reduces the Earth's ability to turn carbon dioxide into oxygen, it can also lead to deadly disasters, such as landslides and flooding.

While mining is essential to industry, it not only has a negative impact on the local and global environment, but it also leads to conflict and war between nations over increasingly scarce reserves of fossil fuels and minerals.

The Industrial Revolution fundamentally altered every aspect of our lives. It dramatically improved the production output of food, housing, clothing, communications technology and medicine, which has created a better quality of life – at least in first-world nations. But it has come at a cost.

The question is: do the benefits outweigh the costs? And have some people benefited more than others?

