



Revolution 5.0 and Gender Disparities

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Abstract

With the advancement in the technological fields, we need to advance our mindsets. Industrial revolution alone cannot take the nation to the level of fully advanced states until the minds are junked. The patriarchal patterns of society have kept the girls as angels. Girls are protected against all the exposures, not only because of the denial in equality but due to the labels of weaker sex, vulnerable and sensitive creatures. But it's the time to understand that the vulnerability, sensitivity, the emotions are positive features when added to anyone's personality, they raise the level of human life. Quality of life is improved and it automatically leads to success in all the spheres. At times the so-called stronger sex falls weak, at times men are full of emotions, at times men are also vulnerable. Then why to associate the technical aspects to men only and socialistic aspects to women only?

In this paper we will try to present the real scenario, stating the problem as it is actually and the consequences that it poses. A survey to get the firsthand information will be circulated and responses will be attached for consideration. Based on that remedial measures will be suggested.

Key words: Technology, women, life

Introduction:

Society experiences drift and moves in the lifestyle and some drifts are undoubtedly favorable and thus welcomed. Such transitions in the society are named as industrial revolutions. Where Europe and consecutively the whole world demanded a change in the way the factories were working. The industrial revolution dated from the year 1760 until somewhere between 1820 and 1840. It led to several inventions which eased the work of the labourers working in the factories. It eased their work timings and their labour. However, it was also during this time that many people lost their jobs. We hear a lot about how the families before the industrial revolution worked from day to night in the fields. Along with the women.

But during such hard times, when women were being berated there were some, who did not back down and made great inventions known to man. **Henrietta Vansittart** was a devoted woman who completed and edited the design of the patent screw propeller, that her father was working upon, after his demise. **Ada Lovelace**, also known as the first lady programmer who worked on the model of mechanical general-purpose computer suggested by Charles Babbage. **Elizabeth Bell** gave the model of a pulley device that was made to clean the chimneys. **Mary Walton** realized that the pollution during the industrial revolution was harming the environment and to work for the betterment of it, she designed a system which pumped air through water tanks and collected



all the pollutants. **Maria E. Beasley** gave the design of an improved life raft. **Josephine G. Cochran** designed the dishwasher because she did not like to do the household works considering she came from a wealthy socialite background. But it is possibly due to her this attribute, we now have a dishwasher. **Margaret A. Wilcox** was an engineer in Chicago and in her model of a car's engine proposed the use of heat, thus giving us the first model for a car heater. **Bessie Virginia Blount** was a physical therapist who took the effort to invent the feeding tube for the welfare of her patients. **Marie Van Brittan** along with her husband **Albert Brown** first devised the home security system. There were many other brilliant inventions done by women during the times they were suppressed by society, but they never relented and gave society some of the most commonly used items with their genius minds.

Irawati Karve is the first Indian female anthropologist, who studied anthropology at a time when it was very unlikely for women to continue studying after their bachelor's degree, thus, it comes as no surprise that she was the only woman in her master's class. **Kamal Ranadive** was one of the earliest Indian scientists who dedicated her research to cancer and also proposed the theory that breast cancer has heredity. **Rajeshwari Chatterjee** was the first female engineer in India. **Anandibai Gopalrao Joshi** was the first female in India who was a physician. **Kamala Sohoni** was the first Indian woman to have a PhD in a scientific field in India, and she discovered that the plant tissue contained an enzyme called 'cytochrome C'. **Asima Chatterjee** is known for her works in the field of chemistry and also for her research on vinca alkaloids and the development of anti-epileptic and anti-malarial drugs.

Women in the past have certainly made an impact on their future which we are enjoying as our present. With the continuation of the women working in the scientific field and making lives easier, it is still a shock to see a huge rift between the woman who keeps working for science and the women who can barely operate the television on their own.

Women have been shielded from the world of technology for so long that it comes as no surprise that women do not know much in that field. We are talking about the majority here because undoubtedly there are women in the field of sciences excelling and making a name for themselves, but most women find it hard to even put together the pieces of a simple table fan. They turn to men for help in such cases. It could be because for so long women have been subjugated by men, but it is surprising to note that women know little of how to function with the simplest of gadgets. Men on the other hand find it a second nature to put together the pieces of an object without reading the manual. It might be due to extreme sexism or due to the lack of confidence of women in themselves. But whatever it may be, it is a shock to see women relying on men for little jobs. Even the Gen-Z girls turn to the boys for help with many things related to technology. Little things like the functioning of a phone, printing materials, and other little things about the technologies.

Many women might claim that they do not like how advanced we have become but it could be due to the fact they cannot operate the littlest of things on their own without feeling as if they know nothing. And nobody likes to feel like a failure.

Apart from that, many women might have an interest but their interests are stomped upon by the powerful men of the society. There is no denying the fact that there are not many equal



opportunities for men and women. Their opportunities in the field of technologies are little to none. Many companies do not hire women, even after their excellent scoring in the IITs just because they are women. But that does not mean all women go into that field, it is about their interests and their love for the selected fields. But even the women who wish to go to the technological fields are frowned upon by society. Though women are considered to be the weaker gender, this mentality of the people has hampered the progression of women.

But everything cannot be blamed upon society. Some women are to be equally blamed for it because they do not put much effort and they do not try to outsmart the patriarchal society. It is all about the initiative and if all the females themselves do not want to come forward and make a change for themselves, nothing else can be done for their enhancement.

The rural women do not care so much about the latest or even the old technologies because of their monetary status and their prejudiced society which expects them to be good mothers and wives. The women are merely retired to the kitchen and household work which takes away their opportunity from them to grow and learn. This makes them rely on their husbands or their sons for little tasks such as operating a washing machine or something as simple as calling someone. Women in the rural areas are kept as far away from technologies as possible because it is 'inappropriate', for them to spend much time away from the kitchen and the household tasks. The women there are not given enough exposure to make decisions of their own. Regardless, many women are also scared to fidget with gadgets and be at the mercy of their in-laws and their husbands. Life isn't fair for women in the villages despite the technical revolution 5.0. And these factors lead them to be scared of technology because it is an alien concept to them. Especially the older generations, because those women have neither seen nor heard of such things. Most of our grandmothers in the villages would not know another thing about the phone except how to call someone.

On the other hand, city girls and women might know how to use the microwaves and the refrigerators but when it comes to the slightest inconvenience they turn to men for help. It is drilled into the systems of women to look for men when anything with the technologies goes wrong.

Even in the past, we know that women relied on men. They were forced to lean on men for every decision regarding their lives. Some women did not know much outside their homes and their kids and husbands. There was nothing for them except for the household tasks. Women in the past were told to be feminine ever since they were kids. Corsets to enhance the breasts of a mere teenager, women not allowed to speak until they were spoken to, them not going out of the safety of their homes often, them not being allowed to study. It was how society shaped women and how they expected them to be. It didn't matter what they wanted as long as they provided heirs to carry on the clan.

The stereotype of people interested in the field of technology is painted as a man or a boy good at math and it is because of his genes that he can be a good student for computers. Women on the other hand show lesser interest in computers because they are forced to be and sometimes choose to be more feminine. The appearance of a woman plays an important role in how society perceives her. A pretty woman studying engineering or technology is considered to be a waste of her beauty.



They are forced to give up their passions for studying computers or engineering and become like the women from the ancient and the medieval age who were submissive and meek.

Even if a woman knows how to change a tyre of her vehicle most women do not get down to do it because it stains the hands and is not very appealing. The women cannot be blamed for it entirely because it is how they are brought up. Ever since a child is young, they are forced to stand up to the expectations of their parents. A girl is associated with the colour pink and a boy is associated with the colour blue. Time and again a young girl is given feminine toys and a feminine environment to grow up in. Even if a girl develops an interest in cars, she has to make do with the dolls that she has. It is the bitter truth of the grooming of a young woman and how she is doted upon by her parents. A boy is made to play ball with his father while a girl is expected to watch Disney and play with dolls. If a girl gets hurt she is isolated for a while and the parents make sure that nothing befalls their daughter ever again. This becomes a constant mentality of a woman while growing up that she is delicate and must do girly things. Her hands must be smooth, her hair must be proper, her skin must be flawless and her body should have the feminine touch that can attract attention. They were all psychologically brainwashed into thinking that beauty is more important and that being pampered is what they deserve. It is all about the upbringing of the individual and the family background and the society that shapes the psychological aspect of a woman when it comes to the technologies.

Literature Review:

According to a study conducted by Sapna Cheryan, a social psychologist working at the University of Washington, she tried to find out how the stereotypes prevent women from joining computer engineering. In her study she clearly stated that it is due to the social norm that computers are for nerdy men, women restrain themselves from going into that field. But through her experiment when she changed the environment of the computer labs into something more gender-neutral, like adding a coffee machine or adding some neutral colours to the place, many women wanted to volunteer for the computer sciences.

Most women are afraid of messing with the gadgets for fear that they could damage them because the knowledge of how it works is beyond them. Their interest in such things is diminished ever since their childhood and those who are persistent are judged for their love for technologies.

Only twenty-nine per cent of internet users in India are women. They are not exposed to the wonders of the world online. But when they are exposed enough or even a scrap of it, they can do wonders with their knowledge. It only takes exposure for one to bloom completely to their extreme abilities. Arti Devi a self-taught community radio program editor came from a very subtle background where she wasn't taught and didn't gain the trust of the people until she became something using her materials. Mathematician Katherine Johnson at the National Aeronautics and Space Administration is another excellent example of a woman who excelled on her own and proved her abilities:

“It is extremely worrying that women are still not very present in technology-related programs and jobs. It's a concern not just because the industry is booming, but, also, because if women don't consider these professional outlets, society as a whole will lose out. The vision women provide is fundamental to devising and implementing solutions for humanity's future. Achieving this will depend on our families, schools, culture, and our knowledge of both past and recent history.” Agell,2021².

Methodology:

For research, a survey was conducted on 33 women of Indian background. The sample consisted of a mixture of rural, semi-urban, urban, uneducated and educated classes of women. The responses to the survey were really alarming. While on one hand, we are talking about technical advancements and robotics and AI, some women do not know how to insert a SIM card into their phones.

Findings And Discussion:

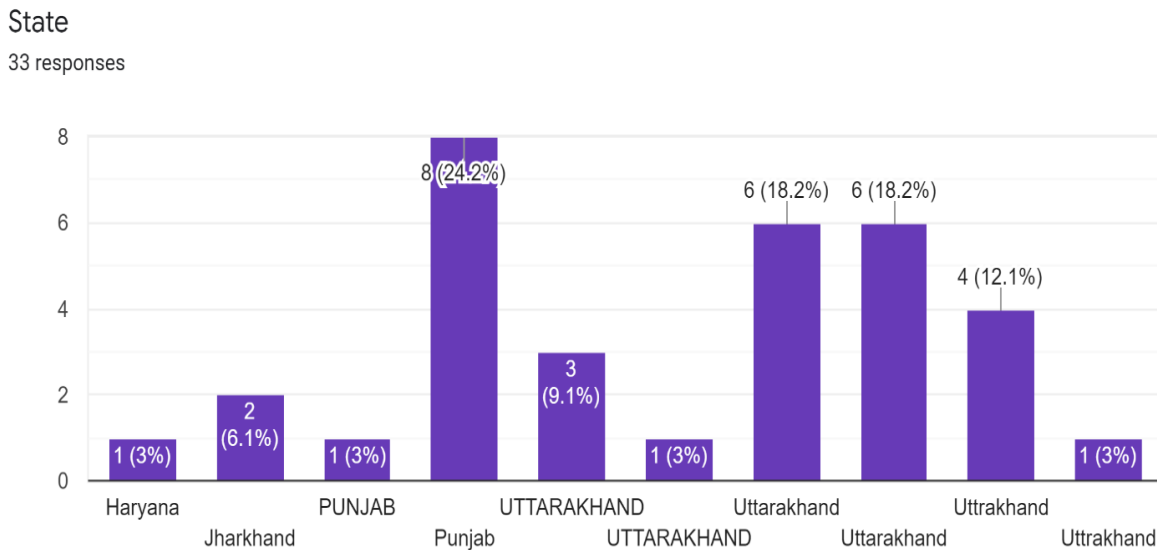


Fig.1

Discussion:

In the responses given in fig.1, we can see that most of the responses received were from the cities of Uttarakhand and Punjab state, which are not very urban. These north Indian states are not that advanced as compared to the metropolis and it is not a surprise that the women responding were mostly unaware of the tech world.

City

33 responses

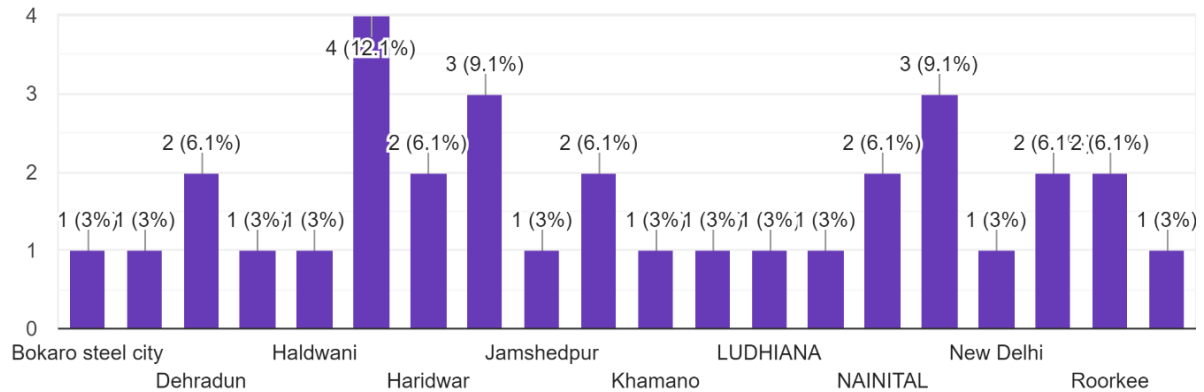


Fig.2

Discussion:

Fig.2 is a representation of the particular cities in the states from where we received the responses.

Occupation

33 responses

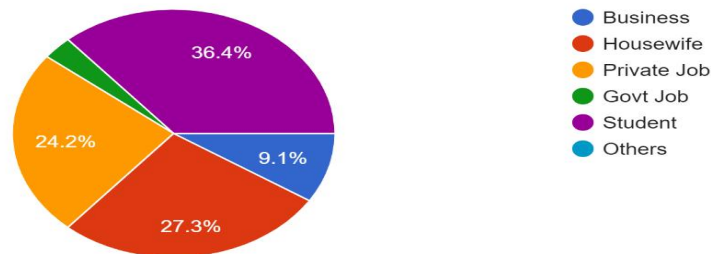


Fig.3

Discussion:

In fig.3, the women were asked about their occupation, which was an important question to know considering that none of the women was in the tech sector. The majority of the elder women were housewives and the rest were students and doing some jobs which were not concerned with technologies. 9.1% women conduct business, 27.3% women are housewives, 24.2% women are doing private jobs, 36.4% are students and the rest are into government sectors or other jobs. But the result implies that 27% women are still housewives in these cities and they are not that exposed to the technical world as the girl students, whose contribution is 36% in this survey.

Do you use android phone?

33 responses

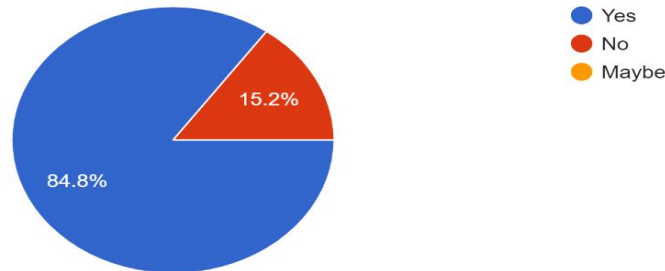


Fig.4

Discussion:

The 15.2% women who responded with a ‘no’ may belong to the rural areas of the states where there are not many opportunities for them to know how to function a phone, it is evident that it is an alien thing for them. But the rest of the population is growing into the Android devices. Though 84.8% of women can be seen using an Android mobile phone, 15% in itself is not a tiny number to be overlooked.

Do you know all the features of your phone?

33 responses

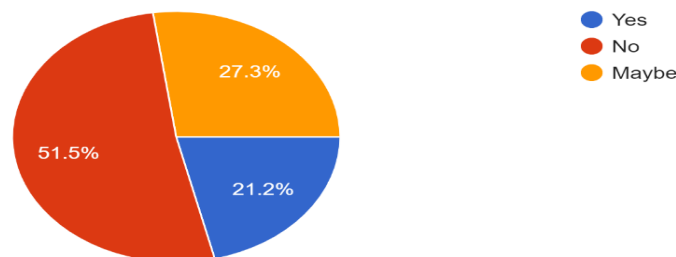


Fig.5

Discussion:

This one was shocking to read that in this hi-tech century, there are women who do not know the features of the phone they use. It is concerning that the women who use their phones, a device which is a major part of their daily lives, do not know everything about their simple gadgets. 78.8% of women do not know much about their phones. While 51.5% outright claimed that they do not know everything about their phones, 21.2% we're still unsure. And 27.3% were aware of how their phones worked.

Do you have any robot?

33 responses

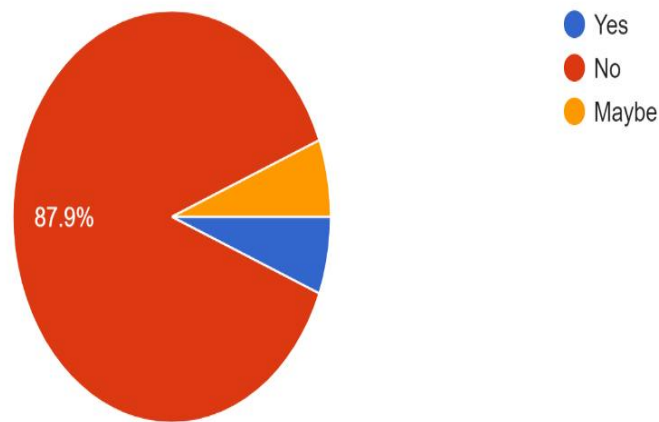


Fig.6

Discussion:

Again, it was equally shocking to realize that only 5% women own a robot and they are sure about it. Still 5.1% are unaware which gadget is known as robot. The situation is really pathetic here. Reason may be that, because the women are told to look after the family and household so much that they couldn't really concern themselves with a gadget and an invention like a robot. Let us consider the graph and take no and maybe as one, we will know that more than 93% of women do not own a robot, out of which 87.9% claimed to not own any device the rest 5.1% were not aware of they owned any and the remaining 5 percent owned a robot. Where we all know how so many products that we use in our daily life are based on robotics only, the awareness is quite less in women

Do you know what are sensors?

33 responses

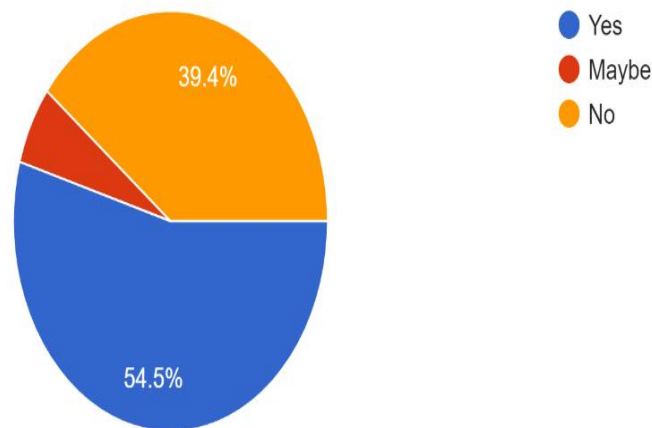


Fig.7

Discussion:

39.4% of the sample size are unaware about sensors! What to say next? The invention of sensors dates long back but the feminine gender is yet to experience the excitement of sensors.

Only 54.5% of women know what the sensors are. Perhaps not in detail but they are somewhat aware of what the sensors in technology are. More shocking to know is the fact that there exist 6.1% women, who are not sure of what is being asked. Sad, isn't

Discussion:

Next, the women were asked about the devices they use regularly and the answers were all different ranging from televisions and fridges to laptops and iPhones etc. The devices stated here were laptops, mobiles, watches, washing machines, television, fridge, ear buds and all but only basic devices. And the real question is, how much do they know about these gadgets?

Do you repair the damaged /broken/not working electronic items yourself?

33 responses

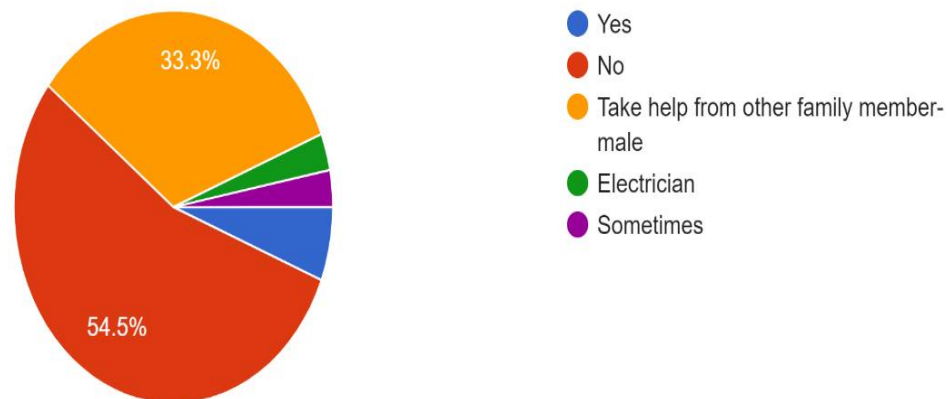


Fig.10

Discussion:

A vast majority of women, not only these 54.5% plus 33.3%, do not know how to repair the broken or damaged goods on their own. They rely on the men in their families or call for an electrician who is in most cases, a man. 54.5% women say that they do not repair their devices on their own and 33.3% women say that they take help from a male member of the family.

Do you save your data in Google Drive?

33 responses

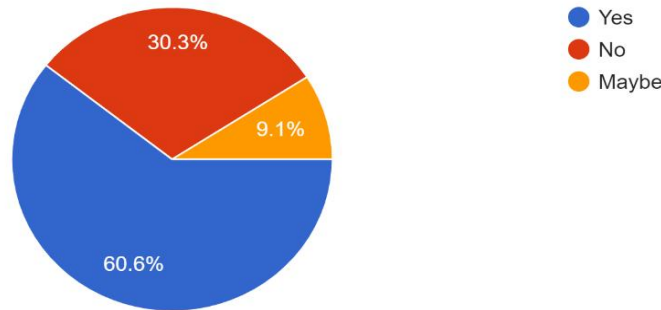


Fig.11

Discussion:

Google Drive is the ultimate app for storing the data securely. And only 60.6% women do save their data in google drive while the others 30.3% and 9.1%, might not even know what google drive is or how it is supposed to function.

What is the easiest gadget/electronic item according to you?

33 responses

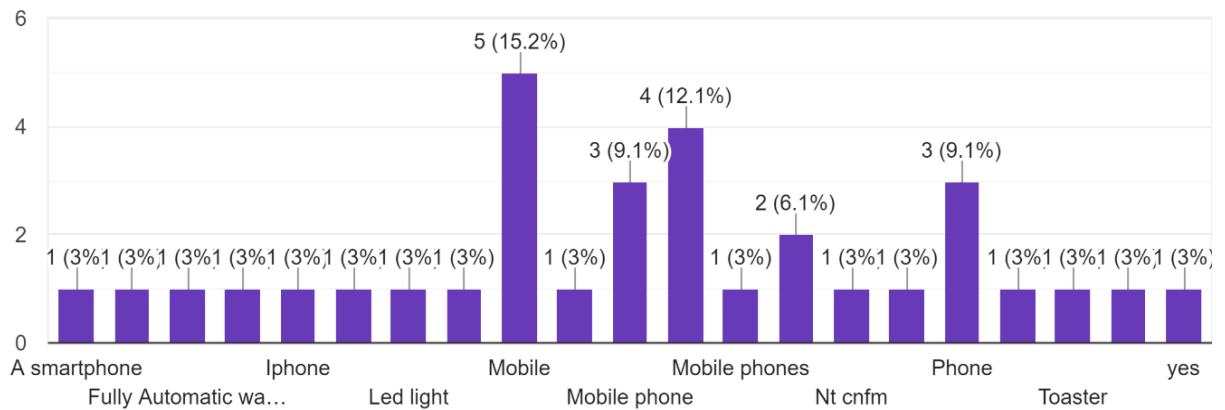


Fig.12

Discussion:

Most of the answers here state a mobile phone which they find easiest to use. It is a handy device and is used for all purposes for a person to not find it easy. Mobile is undoubtedly one of the basic devices used. The others being toaster, automatic washing machine, led light. But when asked the same questions to the guys, what do you think their answers would be? The situation is getting clearer with each new question.

Do you think technology has made our lives easy/comfortable?

33 responses

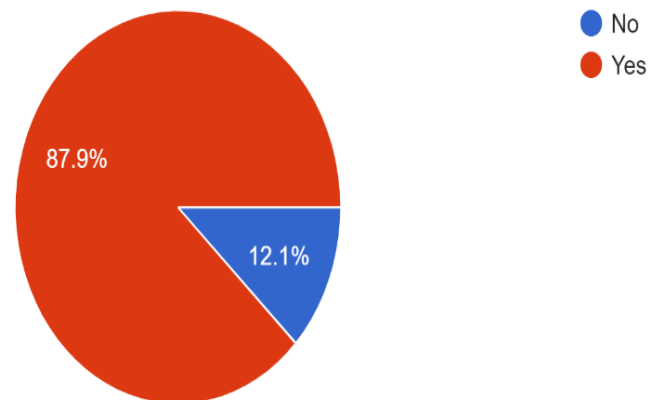


Fig.13

Discussion:

It is no surprise that technology plays a major role in our lives and has eased our regular tasks to a great extent. Still only 87.9% women believe that technology has made their lives easier, of which the rest 12.1% believe otherwise. Imagine coming home after a long day and having to burn the candles instead of just flipping a switch open.

Do you think you can live without technology?

33 responses

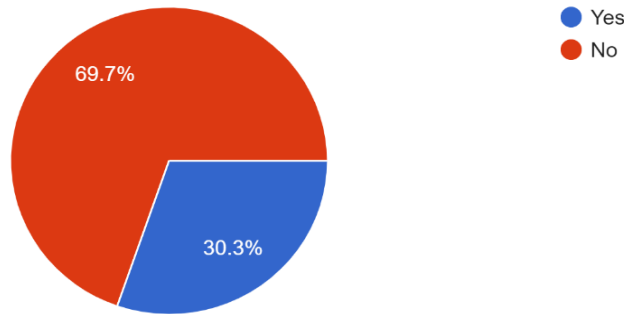


Fig.14

Discussion:

The 30.3% women who voted a yes for the given question were elderly women who already had an experience with living without technology. But the rest of the women, 69.7%, though know that they rely on technology, yet know little about it

Name any technical item that you find hardest to operate.

33 responses

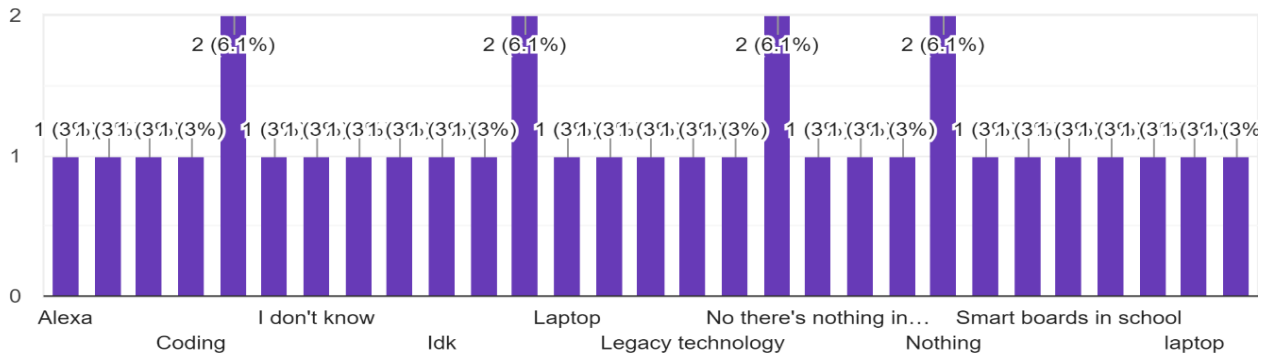


Fig.15

Discussion:

The answers nothing here are mainly from the women not knowing what difficult thing they could operate because it is apparent that they turn to a man whenever a problem arises. And the others are legacy technology, laptops, coding, smart boards and Alexa.

Do you enjoy using technology?

33 responses

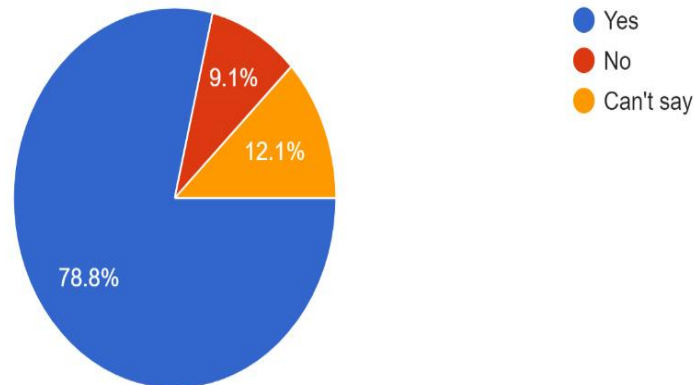


Fig.16

Discussion:

Technology has made our lives easier. The women would like to agree more so because their dishes, their clothes and almost every other hard work can be completed in the blink of an eye with the use of these devices. Therefore, 78.8% enjoy using technology, 9.1% do not and 12.1% are unsure, as fig.16 conveys clearly.

Conclusion:

It is not the otherworldly force stopping the women from being what they can be but we as a society are judgmental and forcing women to take the meek role in it and stop them from progressions. Women in the past, with so many restrictions, have proved to be such great inventors, and the women in the present and the future might just do wonders once they are free from the chains of society. It all begins at home. Letting our daughters and sons choose the path they want to take and giving them full support for it is important for them to grow out of their shells. In the study conducted above, we come to know that it is an alarming state where women do not even know what dangers or wonders their phones might possess. And they turn to men for any help with the gadgets. It's a disappointing state. This is the 21st century world where women are sabotaged and subjugated into believing that they cannot be techs and know and explore more about computers or engineering. With the rise of the 21st century and the rise of technology, it must be known that it shall also be the time for the rise of women in the field of technology so that they can be independent in more ways than one and the revolutions enter into a much better state.



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