

Element A: Presentation and Justification of Problem

Problem Statement

According to The Vision Council of America around 64% of adults wear glasses {4}, and many of them want to be able to lay down on their couches, yet the concern is that due to weak lenses, their glasses would break. Many people result in watching their shows not being able to see anything at all. Our team is focused on the problem of allowing all people with glasses to comfortably watch television without any distraction of a poking lense is our goal.

Introduction

The importance of being able to lay down and watch movies comfortably while wearing glasses means a lot to many people. The Vision Council of America cites that 164 million people are wearing glasses in the U.S. Who wants to watch a movie sitting straight up at night? Who wants to watch a movie laying down with a hard frame jamming into the side of their head? That is why being able to find a way to comfortably wear your glasses while laying down is very important to us. Our goal is to allow you to clearly and comfortably lay down while wearing glasses.

Evolution of Problem Statement

	Prior to our team knowing exactly how we would want to attack this issue, we had to create a problem statement. Through many attempts at creating a statement, we had to address it in terms of who, what, where, when and how many people would be affected. Our problem statement is a result of the progress we had.
What?	An easier way to comfortably watch television without worrying about the possibility of hurting yourself.
Who?	Individuals that wear glasses and might binge watch shows.
Where?	This can happen at home on the couch or on a bed.

When?	This occurs when people who wear glasses want to watch television.
How many people?	About 64% of adults in the world wear glasses and would be affected by this issue. {4}

Problem Statement Development

Problem Statement #1: I hate it when you're trying to watch a movie and you're lying down but your glasses hurt your face and are in the way, I'm sure this occurs for everyone with glasses so we understand your pain.

Problem Statement #2: Just like everyone else, people who wear glasses like to lay down and watch television in their homes on their couch while they relax, but many of us break our glasses because our lenses do not allow us to lay comfortably.

Problem Statement #3: Don't you hate it when your glasses press against your face and you can't see anymore when you're laying down trying to watch a movie?

Problem Statement #4: Around 64% of adults wear glasses, and many of them want to be able to lay down on their couches, yet the concern is that due to weak lenses.

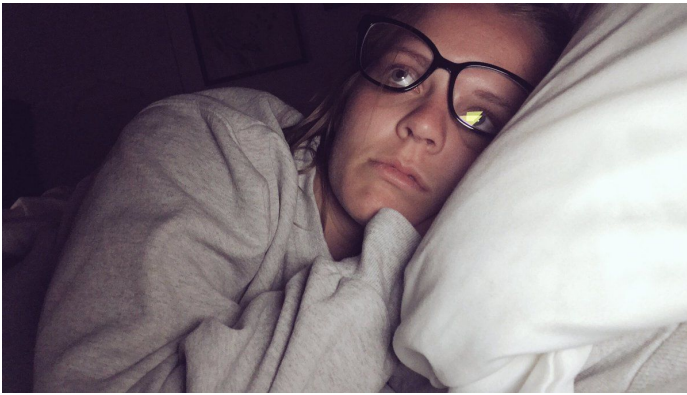
Final Problem Statement

According to The Vision Council of America around 64% of adults wear glasses {4}, and many of them want to be able to lay down on their couches, yet the concern is that due to weak lenses, their glasses would break. Many people result in watching their shows not being able to see anything at all. Our team is focused on the problem of allowing all people with glasses to comfortably watch television without any distraction of a poking lense is our goal.

Pictures of the Problem



This image depicts the issues of wearing glasses while lying down. This person's glasses are rising out of her face, making it difficult for her to watch the television. The individual is left having to choose whether to keep the glasses on the way it is or to take them off and not see. The ideal device would allow people to not have to make a choice.



This image shows a person who is clearly lying down. The glasses are uncomfortably on their face, and the person is left confused. The goal is to have individuals no longer worry about lying down and watching a movie.



This image depicts a person who is hurting on their head near the temples. Having glasses braced on a person's face can cause headaches and uncomfortability. Our team's goal is to prevent this from happening so that there would be no concern for constant aches.

Scholarly Article Title	Reflection	Citation
{1}“What are sleep glasses?”	There are these new glasses that help you watch things from a different direction and it explains how they do what they do and what they are made of.	What are Sleep Glasses? - GUNNAR Richards https://gunnar.com/blog/what-are-sleep-glasses/
{2}“The Lay See Pillow”	A description of what the glasses are and what they are meant for with small feedback	<i>Official Site.</i> (2019). TheLaySeePillow. https://thelayseepillow.com/
{3}“A Couch Potato’s Dream”	An introduction to a new pair of glasses the would make life easier for people who would like to lay down and rest instead if sit up to watch	A couch potato's dream: The 'lazy' glasses that let you watch TV or read while lying flat on your back https://www.dailymail.co.uk/sciencetech/article-2395631/A-couch-potatos-dream-The-lazy-glasses-let-watch-TV-read-lying-flat-back.html
{4}“The Impact of Providing Vision Screening and Free Eyeglasses on Academic Outcomes”	The text is about the fact that lower income and minority children have less access to eye screening tests and this would affect their learning. Constant eye check ups are effective to ensure that children get the right prescription each time. If children and students do not have glasses then they simply can not see and that would play a part into solving our problem. The problem is trying to make sure kids can be able to have safe and strong enough glasses that would not break when they watch television, and in order for that to happen they would need	Glewwe, P., West, K., & Lee, J. (2018, May 18). The Impact of Providing Vision Screening and Free Eyeglasses on Academic Outcomes: Evidence from a Randomized Trial in Title I Elementary Schools in Florida. Retrieved October 23, 2020, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5959017/

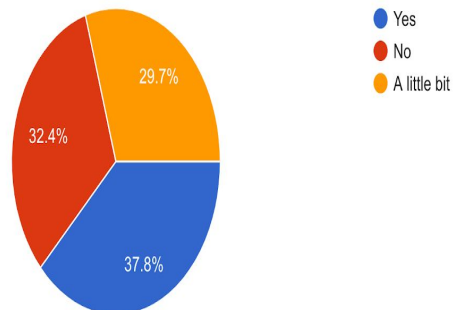
	glasses.	
{5}“Percentage of Children Aged 6–17 Years Who Wear Glasses or Contact Lenses, by Sex and Age Group”	This article by the CDC confirms between 2016-2017 how many children between the ages of 6-17 wear glasses. This is significant to my problem because many children watch television and are constantly moving around so they would benefit from the problem we are trying to solve. We are trying to ensure that their glasses are strong enough and do not break when they lay down.	Percentage of Children Aged 6–17 Years Who Wear Glasses or Contact Lenses, by Sex and Age Group - National Health Interview Survey, 2016. (2017, November 09). Retrieved October 23, 2020, from https://www.cdc.gov/mmwr/volumes/66/wr/mm6634a7.htm
{6}“Could wearing glasses lower the risk of COVID-19?”	This article highlighted the fact that people who wear glasses have a smaller chance at getting COVID than others who do not. Although this does not speak about glasses that break easily, it can help everyone out during this time. People would be less likely to touch their eyes and face with something protecting them.	Rettner, R. (2020, September 16). Could wearing glasses lower the risk of COVID-19? Retrieved October 23, 2020, from https://www.livescience.com/covid-19-glasses-protection.html

Survey Data

Survey Question	Data
How long have you been wearing glasses?	<p> "10 years" "3 years" "2 years" "7 years" "4 years" "5 years" "4+ years" "7-8 years" "9 years" "At least 2 years." "22 years" "Since 2nd Grade" "Around 8 years." "My whole life but I keep breaking them." "6" "Over 30 years" "for about 2 years" "since 3rd grade, i'm in 12th now" "since 3rd grade" "Six years" "I wore glasses on and off since 3rd grade but began to actively wear them (everyday) starting in 9th grade." "Around a year or something along the lines of that." "6 years." "3" "6 years" "20 years ago for reading." "I don't." "ever since 4th grade" "12" </p>

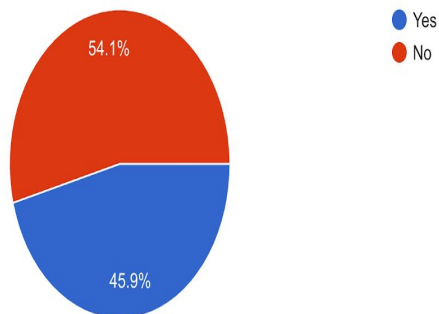
Did you like wearing glasses when you first got them?

Did you like wearing glasses when you first got them?
37 responses



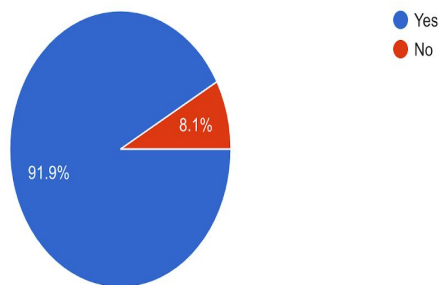
Do you know your prescription for your glasses?

Do you know your prescription for your glasses?
37 responses



Do your glasses ever fog up?

Do your glasses ever fog up?
37 responses



Do your glasses ever fall off of your face? If so, when?

“No”
“No”

"My glasses usually fall off when I do exercise, or when I'm looking down. To avoid this, I use hooks on the back of them"

"Yes they do sometimes especially when i'm bending down sometimes they will slide off my face."

"pretty rare but sometimes when exercising"

"If the glasses are to big"

"Yes, when I bend down"

"Yes, when the screws are loose"

"Sometimes, rarely though. Usually when I'm doing a lot of physical activity. It causes them to slide down a lot"

"They slide, but not fall off. They do fall off, it's because I'm leaning backwards."

"Not really, personally I'm just a oily type of person which means that it slips off my face normally."

"No they haven't."

"Yes when cleaning, whenever I sweat."

"No not really"

"Yes, when I'm running."

"Not really."

"When I am moving fast or jumping. But, it doesn't always fall off."

"No, not really"

"when i wear my mask, or when i look down"

"When I'm laying down or when I bend over to pick up something."

"My glasses now never fall off but my first pair did when I shook my head or looked down"

"If I make abrupt movements, or when I accidentally hit them off my face."

"Yes when I look down when I write"

"Either broken them or moving too much while exercising"

"Yes, but only slightly down my nose"

"They are loose so when I look down they move a little"

"yes, when I look down too much or when i move a lot"

"Not really"

"Not really"

"once when I lost my nose piece"

"yes, when i'm looking down for a while"

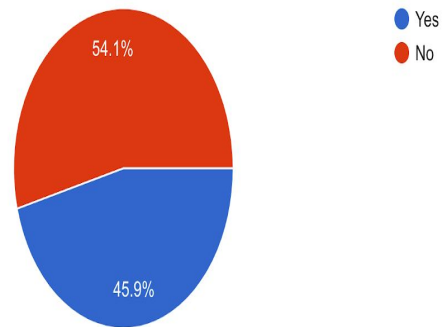
"When I have my mask on they tend to slip because I usually have my glasses on the bridge of my nose."

"yes, when it is too loose"

Do your glasses ever create lines on your face?

Do your glasses ever create lines on your face?

37 responses



When do you find wearing glasses painful for you?

"Never"

"when i'm in bed"

"No"

"At the age of 15 (I wear contacts for the most part now)"

"N/a"

"when i try to lay down"

"sometimes, they are not fitted correctly to the extent where it fits."

"Sometimes ears"

"Never."

"When I'm tired"

"When I have to change my prescription"

"I don't really find it painful for me, sometimes I don't even realize I'm wearing my glasses."

"only pain i'll get is like migraines or headaches but that's not that often"

"Fall asleep with them on or having them on for too long"

"I never find glasses painful to wear unless I stab my eyes on accident"

"When I'm wearing headphones"

"They did when I first got them but now they don't."

"Laying my head on the side."

"Never"

"When lying down, or when someone like a little sibling hits me and the bridge of the glasses digs into my nose."

"It's more if I don't have glasses it's kinda"

"N/A"

"when the nose piece padding wasn't good enough"

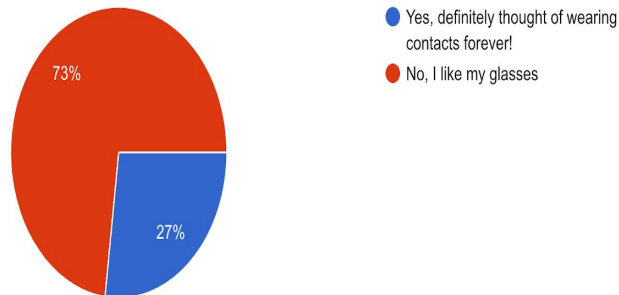
"If I forgot to take them off when I go to bed. I really want laser-eye surgery so I won't need to use them."

"When I'm laying down"

"While lying down."
 "when i get headaches and my eyes start to hurt"
 "I don't find them painful at all"
 "They're never physically painful, they're just annoying sometimes."
 "Wearing it for a long time or even wearing it after a long period of time when I haven't worn them."
 "Sometimes, the frames press against the area where the top of the ear connects to the head."
 "Sometimes. My glasses could either give me headaches, or hurt the back of my ears."
 "Laying down"

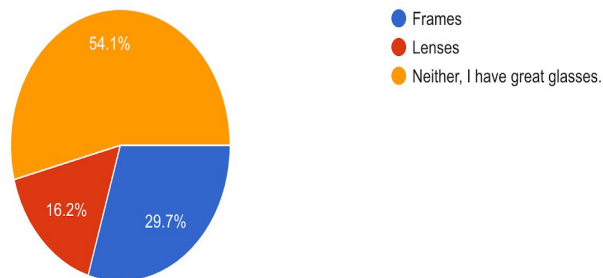
Have you ever thought of not wearing your glasses because they hurt so much?

Have you ever thought of not wearing your glasses because they hurt so much?
37 responses



Are your frames for your glasses ever an issue or is it your lenses?

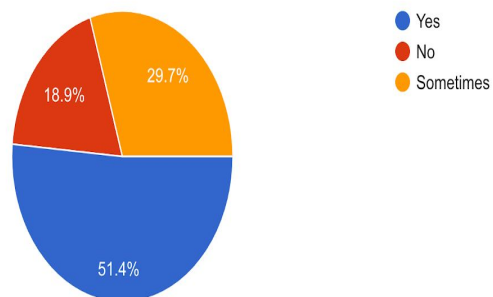
Are your frames for your glasses ever an issue or is it your lenses?
37 responses



Are glasses ever a problem for you when you're lying down?

Are glasses ever a problem for you when you're lying down?

37 responses



Conclusion and Reflection

Through our research from surveys and articles our team concludes to believe that the main problem “..around 64% adults wear glasses, and many of them want to be able to lay down on their couches, yet the concern is that due to weak lenses, their glasses would break. Many people result in watching their shows not being able to see anything at all”, is very much persuadable and logical. According to the vision impact institute research 3 out of 4 people in the U.S have vision correction and 71% of this group wears glasses, this covers more than half a percentage of adults in the population who would experience the problem of not being able to watch television from a comfortable position without having the glasses be a problem. We narrowed this problem down to the specific population of only those who wear glasses. Even though many might just ask why don't they all just wear contacts? Well glasses are more easily accessible for everyone especially with health insurance which will most likely cover a big portion if not everything, for contact lenses you need to pay a yearly fee to get fitted to get them. There are many negative side effects to wearing contact lenses which consist of dry eyes, blockage of oxygen supply to the eyes, irritation etc.

Reference List