

Introduction

Snow is something humans have had to adapt to since the beginning of time. Whether it be fully accepting it and living in igloos, or designing warm, comfortable jackets to withstand it, there's no escaping this yearly shift in climate. Within the last few hundred years, humans have invented sports you can enjoy in the snow such as skiing, and snowboarding and we'll be looking at the gear used to enjoy said activities.

Research Question & Background

Have you ever wondered how or why an invention is continuously improved? This is something we wanted to touch on during our research. Millions of dollars go into the purchase and improvement of winter gear each year, its time to find out if this is progress throughout time or if there is no real difference throughout the years. We will be testing the materials of each snow jacket as well as how well they hold up on a dryness scale in the snow. All of this history behind snow sports and means of survival have led us to the question "How has vintage snow gear changed compared to modern day snow gear?" We both believe the modern gear will have improved capabilities over the vintage gear.

Methods

Materials & Location

The materials we used include two different snow jackets. The modern jacket was a Superdry Original Windcheater (model number MT-3894) and the vintage one was an EBTEK Eddie Bauer jacket (model number V. Code # 06317). We conducted our study outside of Quinn's house because he had a yard that we could sit in.

Procedure

To conduct our research, we had to wait for it to snow as we were planning to sit outside and wear our jackets to determine how they compared to each other based on how we felt before and after.



Figure 1. Wyatt sitting out in the snow, conducting our research. Setting up timer nad camera angles.

Material type Vintage vs Modern

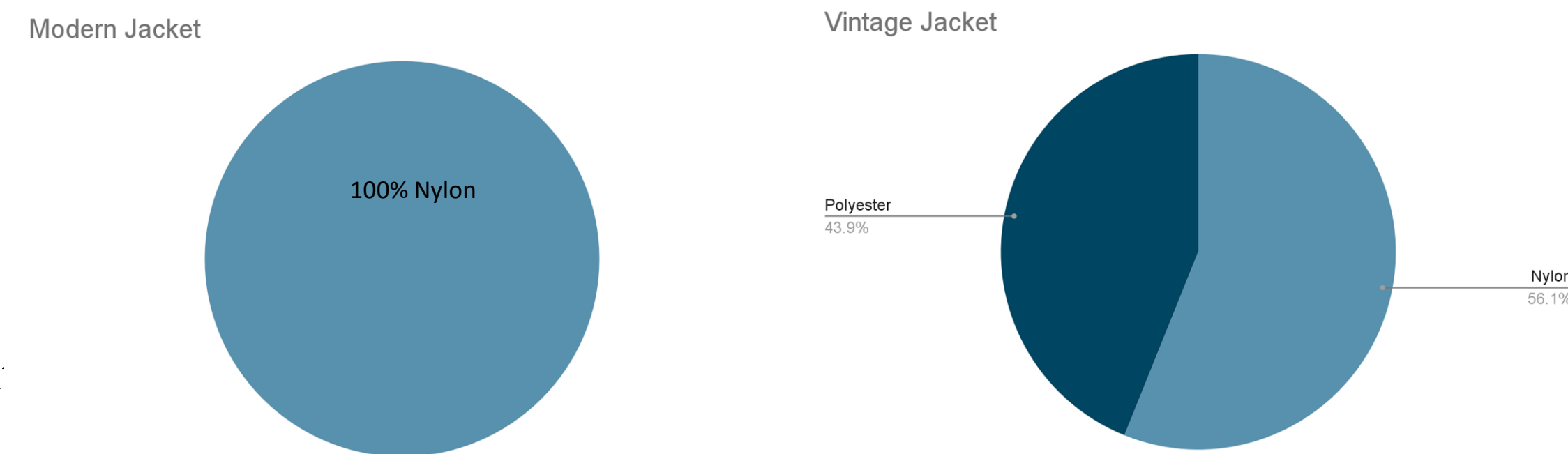


Table 1. Shown above is the material type found on each jackets tag. The modern jacket is a shell that uses only one material type.

Before and after snow test



Figure 2. The left picture is the beginning of our experiment. The right picture is one hour later at the end. Our hand signals represent a visual sign into how dry we stayed from beginning to end. Left is modern, right is vintage.

Discussion

After putting two different eras of snow gear through a test of durability and dryness of snow, we now have some results we can talk about. Our original thought was the modern jacket with the 100% nylon shell would outperform the mixed materials of polyester and nylon from the vintage jacket. While testing this hypothesis the modern jacket ended up having a dryness scale of 5/5 at the end of our experiment, no noticeable change was found indicating the thumbs up from the beginning to end. The vintage jacket ended the experiment with a 4/5 on the dryness scale, showing minor discomfort on Wyatt's rating.

Although the vintage jacket scored less on the dryness scale, We did not have enough data to prove our hypothesis correct. Largely due to this being a subjective study, a more detailed and controlled environment is needed to see how well each jacket performed. At the end of the study we both agreed the modern jacket seemed to perform better but there are to many factors that swayed our results.

Future research needs to have less subjective research and a controlled lab environment. This way there are not multiple subjects to find different data. Weighing the jackets to see how much water is retained/repelled seems to be a more accurate way to interpret data.

Acknowledgements

We would like to thank Eddie Bauer and superdry for transparency on materials and designs used in their gear. As well as the snowsports museum for documenting vintage artifacts from the past

References/ Work Cited

<https://www.superdry.com/us/mens/jackets/details/69470/pop-zip-hooded-arctic-sd-windcheater-black> Superdry copyright 2022.

<https://www.snowsportsmuseum.org/search?q=jacket> Colorado Snowsports Museum 231 S. Frontage Road East, Vail, CO 81657, U.S.A.