# Life After Spinal Cord Injury

## Tableau Dashboard

Link: https://public.tableau.com/views/HumanMigration\_16511842170780/Story2?:language=en-US&:sid=&:display\_count=n&:origin=viz\_share\_link

## Table of Contents

\* [Tableau Dashboard](#Tableau-dashboard)

\* [Motivation](#motivation)

\* [Questions](#questions)

\* [Normalizing the Data](#normaling-the-data)

\* [Problems and Hurdles](#problems-and-hurdles)

\* [Technologies Used](#technologies-used)

\* [Sources](#sources)

\* [Conclusion](#conclusion)

## Motivation:

Growing up with quadriplegic family members, I would like to better understand quality of life after a spinal cord injury.

I decided to narrow my research down to the following KPIs:

* Independent Living
* Raising a Family
* Education
* Occupation
* Mental Health
* Life Expectancy

## Questions:

1) What is the average life span post injury?

2) What percentage of these survivors go on to raise families?

3) What does education trajectory look like?

4) What does career trajectory look like?

5) Is there a correlation between factors such as independent living, raising a family, mental health, education, occupation and life expectancy?

## Normalizing the Data

The dataset I selected consisted of years from 1972 through 2021.

I selected to work with all data from all years.

I then created multiple dataframes and narrowed down to the values that I wanted to use for my analysis.

My initial approach was to use data from 2 years 2015 and 2019 and then compare the difference/ correlation, after having done the entire process in Python I realized that there was not much of a difference between the two and therefore I ended up using 2019 data.

## Problems and Hurdles

It was a challenge to clean and organize data in Python for some of the dataset. Statistical Risk Assessment data consisted of values in log format and that required some calculation in python to convert it to readable value. Web- scarping Global Peace Index was another hurdle that took some time to work.

## Technologies Used

1) Python / Pandas - for exploration, normalizing and aggregation of the dataset

2) Tableau - for creating interactive dashboard

3) PowerPoint - for introduction of Project

4) Git - for version control

## Data Sources

To answer the above questions I used the following sources to collect datasets for my analysis

1) National Spinal Cord Injury Statistical Center

https://www.nscisc.uab.edu/Research/NSCISC\_DatabasePublicUse

## Conclusion

The data analysis shows countries with most incoming immigrants are USA, UK, Saudi Arabia, Russia, Germany, Australia, France, Italy and Canada. It is given that theses countries have better opportunities for work, health and education that can drive people to move for better life for themselves and their loved ones. Countries where people are moving from include Mexico, India, Syria, Ukraine, China, Russia, Pakistan, Philippines, Afghanistan. My analysis shows some of these countries are ranked high in statistical risk assessment for mass killing however the correlation was not sufficient enough to claim that this could be the cause of migration. Most of the countries are developing countries and it could be concluded that violence, religious freedom, and unemployment could also play a vital role in migration.