**Knuckle Cracking Leads to Arthritis**

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Growing up and even now I find myself cracking my knuckles at every opportunity I get. It is this sensation you have between your finger joints where the pressure builds, and you know the time has come to get to cracking. Times where I would find myself cracking my knuckles, I would often hear my parents or elderly family members telling me to stop cracking my knuckles as it will lead to arthritis, but does it really? No, it is in fact a myth, the satisfying pop sound when cracking our knuckles is caused by released gasses in our joint capsules (Gulden 2021). Growing up it was explained to me by my elderly family members, that they too used to crack their knuckles and that is how they got arthritis. As the saying goes, bad habits die hard, I am guilty and never got out of this habit. Although there is no correlation between the two, there is a downside to repetitive knuckle cracking, in most cases it may lead to loss of grip strength (Harvard Health 2020). In my opinion, the loss of grip strength maybe the reason why this myth has stuck around due to its similarities with arthritis symptoms mobility issues.

Therefore, if I were to dig into it and prove that knuckle cracking does not lead to arthritis, the methodology I would use to gather data and provide my finding would be CRISP-DM. The questions I would start to ask are, “what are the leading causes for arthritis?”, “what is the age range where arthritis is most common?”, and “how often does one crack their knuckles?”. My next step by using the methodology would be the list of data I would be able to collect and examining the quality of the data and its usefulness to my questions. After gathering the list of data, the following step is to prepare it and clean it up to make it more refined and clear the noise. Once the data is cleaned, I will then begin the modelling phase and revised my parameters in the data. Then, after revision comes evaluation of the results and this is my opportunity to check if I need to go back a few steps to produce a better result. Finally, after multiple phases to reach the outcome of the data that was gathered, is the important part which is the storytelling of the data. By being able to convey the findings properly I will finally be able to prove that knuckle cracking does not lead to arthritis. Defining a clear line between arthritis symptoms and results of chronic knuckle cracking will give a better understanding to the myth that has stuck around and is easily misinterpreted as correlated with one another. Overall, still having this bad habit, I learned that this will not lead to arthritis, but it is still a great start to finally stop cracking my knuckles. In addition, I learned why the CRISP-DM methodology is popular among the data science field as it provides flexibility to the process of gathering data, as if you’re checking your work each step as you go on making sure you don’t miss anything.

**References**

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